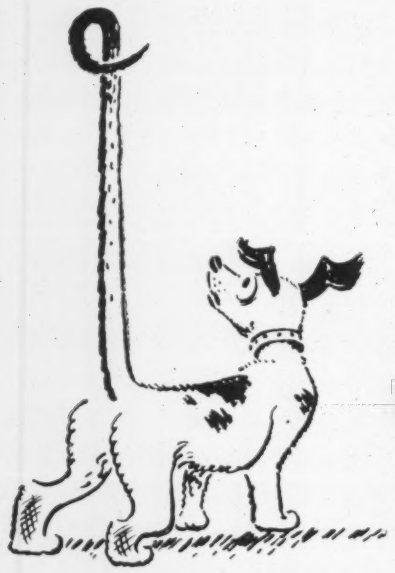
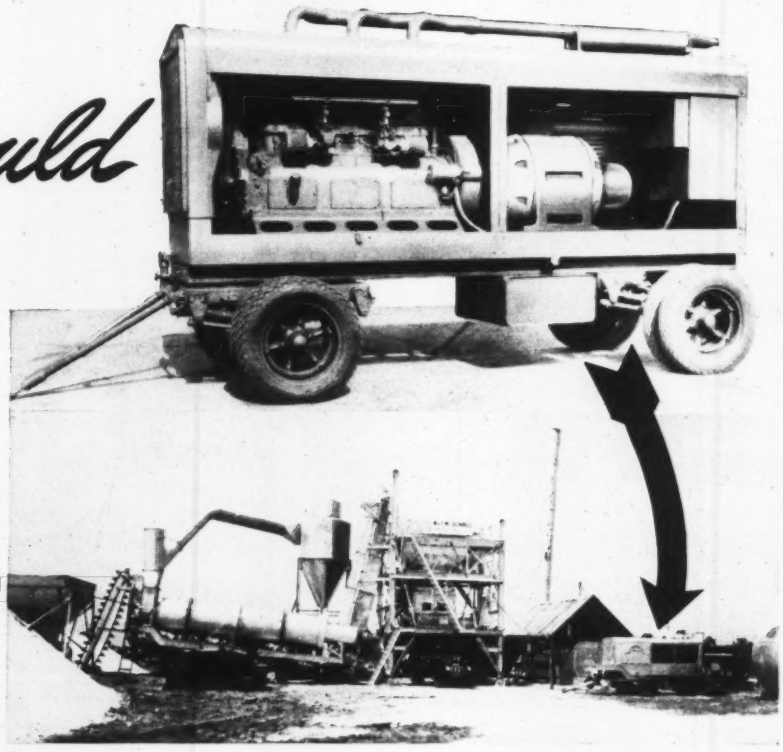
ENGINEERING NEWS-RECORD

ly completed million-dollar incinerator at Honolulu, T.H., handles 150 tons of material daily

This Tail Wags the Dog

and it should





Mobile asphalt plant built by Iowa Manufacturing Company and powered by General Electric engine-driven generator.

Electrification of your mobile asphalt plant with a portable engine-driven generator enables you to locate your engine *away* from the contaminating atmosphere immediately surrounding the plant, thus improving plant operation these four ways:

1. **Reduces combustion-engine maintenance**
2. **Simplifies mechanical transmissions**
3. **Provides automatic process control**
4. **Simplifies manual operations**

The power plant can be located in relatively cool, clean, air out of the hot, adverse atmosphere which surrounds the conveyors, pug mill, and drying drum, thereby greatly reducing engine maintenance and facilitating adjustments and servicing. Power is supplied smoothly and efficiently to the individual electric motors on the machines through a flexible, protected cable. This electric cable is easily disconnected when the plant is moved. Individual motor drives of the plant components simplify the mechanical drive equipment—power is supplied where it is used. Increased mechanical reliability reduces shut-downs and costly delays.

Automatic electric control of the operating plant maintains the asphalt mix consistency to predetermined specifications. This control is reliable and accurate, resulting in fewer rejects by inspectors—more asphalt can be produced in each working day.

General Electric is prepared to supply all the proper electrical equipment for your mobile asphalt plant, including generator, motors, control, electronic weighing equipment, and cable. If you are designing a mobile asphalt plant, *now* is the time to find out what complete G-E electrification can mean to you and your customers. If you are now operating a mobile asphalt plant, these same advantages are available to you through conversion to electric drive. Investigate how electricity on your job can produce a *better product at a lower cost. Apparatus Dept., General Electric Company, Schenectady 5, New York.*

GENERAL ELECTRIC

655-53

ELECTRIFIED CONSTRUCTION

BETTER PRODUCT • LOWER COST

News of the Week

ENGINEERING NEWS-RECORD • SEPTEMBER 12, 1946 • VOLUME 137 • NUMBER 12

Building volume indicators show curtailment effects

Commerce Department survey shows slackening in rate of increase of work put in place — Engineering News-Record weekly moving average also shows drop

Two indicators of construction activity—the monthly report of the Construction Division of the Department of Commerce, and *Engineering News-Record's* weekly moving average of contracts awarded—last week began to reflect results of recent moves by the federal government to curtail non-residential construction.

While the Commerce report showed a new high of $1,039,000,000 for construction put in place for August, it showed only a 2 percent gain over July and for non-residential work, a lower rate of increase than in several previous months.

Including all types of construction put in place during the month (many of which are not reported by *ENR*) the report said that $828,000,000 was credited to privately-financed construction, and $211,000,000 to government work of all kinds. Of the privately-financed figure, $335,000,000 was residential work, exclusive of farm buildings, trailers and conversions.

More sensitive indicator

Meanwhile, *Engineering News Record's* weekly moving average—a far more sensitive indicator of heavy construction trends since it screens out almost all but engineering construction—already showed the effects of curtailments.

As a comparison, the average for the month of July was reported at $131,000,000 per week. This fell off to $115,000,000 for August, and as of Sept. 5, was down to $106,000,000. The August average included the low week ending Aug. 22, when contracts totalling $97,000,000 were awarded—the lowest single week shown by this indicator since March of this year.

The *ENR* average, however, is still far above that of 1945, when it touched only $34,000,000 for August, but is below the average for August, 1941—the last pre-war year, when the figure was $124,000,000.

All classes of construction as reported by *ENR* are above the 1945 figures except public building and unclassified public works. Street and road work and earthwork and waterways stand at an all-time high.

In a detailed breakdown of the August total of construction put in place, the Commerce report indicated that—outside of residential construction—public utilities accounted for a major portion of the private work, with a total of $78,000,000 credited to expenditures by these utilities. Military and naval expenditures for August were listed at $13,000,000, and highway work accounted for $80,000,000 of the total figure.

National plumbing code now being developed

A national uniform plumbing code for housing which it is hoped will help speed plumbing supplies into veterans' housing is being developed under the auspices of the National Housing Agency, according to an announcement last week.

The nation's plumbing trades as well as government agencies concerned with housing and health standards are represented on the committee working out the code, the announcement said. The feasibility of national uniform plumbing standards was demonstrated during the war, when emergency standards were set up in 1941 and made mandatory during the emergency.

Probe economic status of engineers

Six professional engineering societies and the U. S. Department of Labor are now conducting a joint survey into the earnings and economic status of professional engineers before, during and after the past war.

The survey is the first major inquiry into the economic status of engineers since 1935, when the Bureau of Labor Statistics issued a report for the years 1929 to 1934. The new survey will supply information for the years 1939, 1943 and 1946. The data are to be collected by means of mail questionnaires, which will be completely anonymous.

An announcement by the Department of Labor said that about 125,000 engineers will receive the questionnaires.

Data collected are intended to permit individual engineers to compare their own status with that of others in their own engineering field, and appraise opportunities in other fields of engineering; assist employers in establishing appropriate salary scales; and aid in improvement of the economic status of the profession.

The questionnaires were sent to a group of 200,000 representative engineers enrolled with the National Roster of Scientific and Specialized Personnel.

This restudy of the economic status of engineers in this country was inaugurated by the Engineers Joint Council through its Committee on the Economic Status of the Engineer. After the Bureau of Labor Statistics of the Department of Labor has taken off the information it needs for its report, a special report for the Engineers Joint Council is to be prepared by Andrew Fraser, Consultant to the Committee on Survey of the Engineering Profession, which is a subcommittee of the Committee on the Economic Status of the Engineer.

Wm. N. Casey, executive secretary of the American Society of Civil Engineers, is chairman of this subcommittee. Representatives of other engineer societies in the committee are: L. W. Bass, AICE; E. G. Bailey, ASME; Mark Eldredge, AIEE; Ernest W. Ellis, AIMME; and A. Van Praag, Jr., NSPE.

NEWS IN BRIEF

In telegraphic form, here are latest news developments on the engineering and construction front during the week.

Water Supply—Immediate enlargement and improvement of the *Defiance, Ohio,* municipal filtration plant has been urged by the state Department of Health, on the grounds that the present facility is "dangerously overtaxed". . . . *Mt. Carroll, Ill.,* councilmen have authorized a *Moline* firm to survey the city's waterworks needs. . . . *Columbus, Ga.,* plans an immediate start on construction of a $225,000 addition to its waterworks, to double present capacity. . . . *Rock Island, Ill.,* will ask bids soon on a $125,000 elevated water tank. . . . *Cookeville, Tenn.,* awarded a $90,000 contract for construction of a water-supply dam on the Falling Water River, five miles east of the city. . . . *Albuquerque, N. M.,* has awarded contracts totalling $206,000 for two new pumps and 28,000 ft. of 16-in. water mains to improve its system.

Highways—Only 378 miles of *Alabama's* 6,650-mile state highway system will remain unpaved or not under paving contract by Oct. 1. . . . *Pennsylvania* has purchased 246 new trucks and 532 new snowplows in preparation for its winter snow campaign. . . . More than $149,000,000 in construction is badly needed on *Washington* state highways, according to C. B. Shain, commissioner. . . . A $16,500,000 street paving and repair project in *Boston* is making satisfactory progress, a recent mayor's report said. . . . In compliance with recent requests from the federal government in the interest of economy, *Arizona* has cut $5,000,000 off its new road program. The Metropolitan Commission of *Halifax, N. S.,* is now preparing plans for a $15,000,000 bridge between Halifax and Dartmouth. . . . *Mississippi* awarded contracts totalling $1,232,600 on nine road projects, bringing total work let to date to about $10,000,000. . . . *Texas* announced that more than $1,000,000 worth of farm-to-market roads had been completed.

Bond Issues — *Jackson County (Okla.)* has postponed a scheduled vote on a $300,000 issue to finance a new hospital because of "irregularities" in filing of petitions. . . . *Phoenix, Ariz.,* will vote about Dec. 1 on bond nance waterworks improvements, airport work and sewer system extensions. . . . Voters in the center school district at *Kansas City, Mo.,* approved a $378,000 issue for new buildings. . . . Voters in six *Ohio* communities, including *Warren, Geauga County, Wilmington, Lima, Martins Ferry* and *Boardman Township,* will decide on issues totalling $4,620,000 in election during November to finance a variety of civic projects. . . . *Portland, Ore.,* will vote Nov. 5 on a revived proposal for establishing a $3,000,000 civic center. A similar proposition was defeated in 1945.

Construction—The Georgia Power Co. has started work on a $4,000,000 steam generating station on the Flint River, 10 miles south of *Albany, Ga.* . . . The J. I. Case Co. announced plans for a $3,000,000 expansion program to include construction of many new buildings, at *Springfield, Ill.* . . . The Southern Railway System will build an $887,000 heavy repair and maintenance shop at *Chattanooga, Tenn.* . . . The May Department Stores Co. plans a $4,000,000 store building at *Phoenix, Ariz.* . . . Danahy-Faxon Stores Inc. have awarded a $1,200,000 contract for construction of a new building to house a warehouse, offices and a retail food market at *Buffalo, N. Y.* . . . Army engineers have been directed to prepare plans and specifications for new Veterans Administration hospitals at *Toledo, Ohio, New Orleans, La., Klamath Falls, Ore.* and *Dallas, Tex.*

Housing—Bids will be received until September 23 on all buildings at Camp Wheeler — a wartime infantry replacement training center at *Macon, Ga.*— for salvage. Forms necessary for submitting bids are obtainable from J. W. Putnam, 523 Atlanta National Bank Bldg., Atlanta, Ga.

Plan regional drainage network for Illinois area

Plans for the establishment, maintenance and operation of a regional drainage system in Madison and St. Clair counties, Illinois, (near St. Louis, Mo.) to prevent a recurrence of the floods that followed heavy rain on the nights of Aug. 14 and 15 are being discussed.

Large areas of East St. Louis, Washington Park, Fairmount City, Belleville, Granite City, Madison and other towns in the two counties were hard hit by the flash floods as 2000 persons were driven from their homes and a property loss of from $3,000,000 to $4,000,000 was caused.

An engineering committee is to be appointed to draw up plans for the additional drainage facilities to supplement those of the East Side Levee & Sanitary District and the local sewers of the various communities. Help from the Federal government will be sought.

End 77-day construction strike at Houston, Texas

The Building Trades Council strike against contractors at Houston, Tex., which had lasted 77 days (*ENR* July 18, vol. p. 71) was brought to an end August 29, when a compromise settlement was signed.

The strike was called June 13 to force union recognition.

The agreement provides that all construction jobs at Houston henceforth will be "all union," after a period of 90 days has elapsed in which present employees will be given the option of joining a union.

The agreement also provided that the Building Trades Council will not recognize any secondary or unlawful picketing of the contractor's job or the job of his subcontractor, and that the Council will not use the employment of its members as a means for labor organization.

THE COVER PICTURE

Although it has not been formally handed over to the city administration, the newly-completed $1,060,000 Kapalama incinerator is already handling more than 150 tons of material for the City of Honolulu, T. H. One of two being built for the city (*ENR* August 15, vol. p. 209), the Kapalama plant will not be turned over to the city until the second — at Kewalo Basin — is completed about October 1. Contractors for the two incinerators are the McDonald Const. Co., St. Louis, Mo., and the engineers are Metcalf and Eddy of Boston, Mass.

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Colorado basin states will continue cooperative river development studies

New committee set up to continue study of interstate water questions despite withdrawal of California and Nevada

Five of the seven states in the Colorado River basin are continuing their cooperative studies of plans for development of the Colorado River following the resignation of California and Nevada from the interstate committees set up for that purpose several years ago (*ENR* Sept. 5, vol. p. 285).

Organization of a new committee, known as the Colorado River Basin States Committee, was consumated at Salt Lake City, July 29-30, as a result of the resignation of California. Representatives of Nevada attended that meeting, but subsequently withdrew from the new committee.

At the time that California sought revision of the Boulder Canyon Act in 1938, two committees were set up, one called the Committee of Fourteen, which was made up of two representatives named by the governors of the seven states in the river basin, and another known as the Committee of Sixteen, which included two additional representatives of the power interests in California. After several meetings, an accord was reached on revision of the Boulder Canyon Act, and as a result the seven states united in supporting the Boulder Canyon Project Adjustment Act, which ultimately was passed. However, with respect to two important problems, the representatives of the seven states failed to reach an accord. These were with respect to the contract between the Secretary of the Interior and the state of Arizona for water out of Lake Mead, and the treaty between the United States and Mexico, which was approved last year (*ENR* Jan. 25, 1945, vol. p. 123, and April 26, 1945, vol. p. 596).

On the Arizona contract matter, six of the seven states agreed upon a form of contract and gave their support to it. Ultimately, that contract was approved by Arizona substantially in the form approved by the six states, and as a result, after more than 20 years of refusal to become signatory to the Colorado River Compact, Arizona unconditionally ratified that compact.

The Committee of Fourteen held numerous meetings relating to the treaty with Mexico and ultimately developed a formula that was closely followed in the final draft of the treaty. This formula was supported by five of the states and opposed by California and Nevada. Since the seven states could not reach unanimous agreement through the committee, each was left to take a position with respect to the proposed treaty in accordance with its own desires. Representatives of the states remaining on the committee declared that the failure of the Committee of Fourteen to agree was made clear to the Foreign Relations Committee of the Senate when the treaty was under consideration by that committee. Therefore, representatives of the other states find no justification for California's claim that the committee was used to "over-ride the interests of a participating state", as reported in *ENR* Sept. 5, vol. p. 285.

Apportionment of water

Following the six-state meeting in Salt Lake City, representatives of the five Upper Basin states met and organized a committee to determine upon the allocation of the water apportioned to those states under the Colorado River Compact. This action was taken at the request of the governors of the five states, who met at Cheyenne on July 22 and decided to undertake to draft an Upper Basin Compact for the allocation of the water among the five states.

Attempts to apportion the water allocated to the Lower Basin states among those states so far have borne no fruit. However, each state has a contract with the Secretary of the Interior for specific quantities of water from Lake Mead.

Cleveland to ask bids on airport dike work

The City of Cleveland, Ohio, will ask for bids shortly for construction of one-half of a slag dike as a preliminary to construction of a $4,000,000 lakefront airport.

The new airport, which will require from two to four years to build, is to provide two runways, each 3,500 ft. long, anchorage for seaplanes and beaching facilities for amphibious aircraft. It is to be located along the Lake Erie shore between East 12th and East 30th St.

Army Engineers will aid in landfill operations by dumping dredgings from the Cuyahoga River into the area behind the barrier as soon as the slag dike is constructed.

Los Angeles bond vote withdrawn

Defeat of $44 million issue in special balloting forces dropping of re-test scheduled for November. Pay-as-you-go plan adopted

The defeat at a special election August 4 of $44,000,000 bond issues for civic improvements in Los Angeles County, Calif., has forced county supervisors to order all bond propositions off the November general election ballot in favor of a pay-as-you-go plan for new construction.

Bond issues to finance a new $19,000,000 courthouse, a $5,000,000 jail, a $2,000,000 juvenile hall and a $6,000,000 incinerator program were defeated by voters in the August 4 election, and had been scheduled for a re-test in November. Four other propositions, including a salary raise for county supervisors, a $3,000,000 museum building, and $8,200,000 for improvements to beaches and parks, also were defeated.

A four-point program as solution to the county's construction problems includes:

Urging the state legislature to amend a $90,000,000 cities and counties post-war construction bill to include provision for aid for courthouses and jails; formation of an authority or district for construction of the incinerators; formation of an authority to set up self-liquidating beach recreation facilities, and that the board proceed immediately with plans and specifications for the proposed juvenile facilities, securing matching funds from the state and providing the county share from capital expenditures of the 1947-48 budget.

Engineering firm to install plant equipment

Ford Motor Co. officials announced last week the award of a $3,000,000 contract to the engineering and construction firm of F. H. McGraw Co., for the purchase and installation of new production equipment in a Ford assembly plant now being built in St. Louis, Mo.

The contract, officials said, marks a departure in Ford policy, in that it is the first time the company has called in an outside agency to purchase and assemble its equipment. The major share of the work to be done by the McGraw company consists of installation of conveyors, spray booths, welding equipment, steam ovens, drying ovens, and necessary services for these installations.

DEVELOPMENTS BEYOND U. S. BORDERS

Digested from reports by Engineering News-Record correspondents and the McGraw-Hill World News Bureau

Brisbane, Australia, plans $20 million water and sewerage expansion program—Santiago, Chile, considers subway system—Mexico discusses overland ship transport

Australia—Brisbane, capital of Queensland—a city with a population of 500,000 and an area of 385 sq. mi.—plans to spend $20,000,000 in the next five years for sewerage, sewage treatment and water supply.

According to the city's Department of Works, the expenditure would be the equivalent, in physical volume, to an expenditure in the United States of $40,000,000.

A filtration plant of rapid sand filters with a capacity of about 24 mgd. (in U. S. gallons) is now under construction on two knolls of the city's hilly terrain. The new plant will be in addition to existing water treatment facilities which now include both slow and rapid filters. Daily water consumption has been measured at 60 to 70 gals. per capita.

Feature of the new plant is a filter rate control device, designed by the Department of Works, which measures effluent flow by loss of head around a bend or elbow. The design is based in part upon published results of tests in measuring flow through pipe bends at a midwestern university hydraulics laboratory in the United States.

Preparing for the program, George R. Goffin, deputy chief engineer and assistant manager for the department, is spending several months in the United States studying water supply and sewage treatment plants in major cities. On completion of his tour, he will visit several plants in England.

Accompanying Mr. Goffin is W. J. Chamberlain, Brisbane city chemist, who is making a study primarily of the bio-chemistry of sewage. He said that only about 20 percent of Brisbane is now served by sewers, and a large construction program is contemplated in this field.

Transport . . . .

Mexico—Reviving a long-discussed plan for the overland transport of ocean-going freight steamers across the 185-mile Isthmus of Tehuantepec, Modesto C. Rolland, Mexican civil engineer and head of the Free Ports Department of the Treasury Department recently presented a new plan to President Camacho.

Rolland was one of the backers in the recent construction of Mexico City's huge "Sports City", a $10,000,000 enterprise (*ENR* Nov. 8, 1945, vol. p. 632).

The Isthmus—often considered as site for a second canal between the Atlantic and Pacific oceans—is already the scene of considerable construction activity, as the government proceeds with its plan to rejuvenate the ports of Salina Cruz, on the Pacific and Puerto Mexico, on the Atlantic, and construct a highway between the two cities (*ENR* April 11, vol. p. 518).

Under Mr. Rolland's plan—which would cost an estimated $200,000,000 as compared to more than $2 billion estimated for construction of a canal—eight or ten railroad tracks would be constructed across the isthmus, supporting enormous, wheeled, rigid steel boxes that could support vessels weighing up to 15,000 tons, each box (which might have as many as 300 trucks) being supplied with its own diesel power units so that it could operate as an independent "train". The motors would be sealed, so that the "trains could be run below the water-surface at either end of the track to take on or discharge ships.

Chile—Facing the impasse of a city laid out along 16th century lines, served by an ancient streetcar system for "rapid transit", which has nevertheless more than doubled its population in 20 years, Santiago is considering the expenditure of about $15,000,000 for a subway system.

Recent meetings at Santiago of the Association of Chilean Engineers served to highlight the city's multiple transit problems. Officials pointed out that in 1921, the city had a population of 574,000. By 1940, the population had increased to 1,005,699, and the increase has continued during war years.

The city's narrow streets are cluttered with streetcars that carry more than 471,980,000 passengers each year, and the cars and the tracks on which they run are becoming increasingly inadequate to handle this load.

Officials of the Public Works Department told engineers that they considered "hopeless" the task of widening many more of the narrow, winding streets cutting through the downtown area. They have been preparing plans, however, for construction of 16-mile open-cut-and-tunnel subway system, to cost about $13,670,000, to be equipped with rolling stock and other appurtenances to cost an additional $630,000. It is contemplated that the city will charge a fare of about 4 cents.

Under present Chilean law, all construction work would have to be done

Keystone photo

***Swedish Bridge Opened**—The new Skanstullsbron Bridge, carrying southbound traffic out of Stockholm, Sweden, has been completed after four years of construction work. The concrete and steel structure is 1,875 ft. long and 86 ft. wide, and provides spaces for a four-lane motor highway, a railroad track and pedestrian traffic. Total cost was about $5,130,000.*

[(Vol. p. 336)

by Chilean contractors, but officials said that if foreign capital can be interested in the work, a special law might be passed to permit such a company to bring in its own forces.

Engineers pointed out that the excavation would not be difficult, since Santiago is underlaid by several hundred feet of cemented sand and gravel, and the ground water level is about 100 ft. below the surface.

Venezuela—A commission appointed recently to study possibilities of an underground transport system for Caracas recently urged the government to "go slow" in its plans, because of the great expense involved. The group suggested an economic study of the subway proposal to determine if it could be made a paying proposition.

France—The important railway viaduct of Caronte, a structure more than 1,000 yards long which spans the pool of Berre above Marseilles, is now back in service following repairs directed by the French Army. The movable span of the bridge was blown up by retreating German troops. Use of the viaduct eases tremendously the flow of rail traffic into and out of the port.

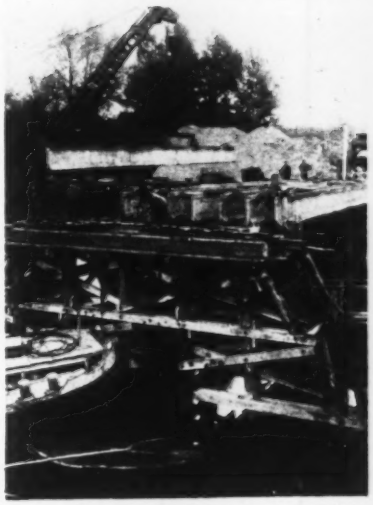
England—The British Ministry of Transport has revived a war halted project for construction of a $13,000,000 vehicular tunnel under the Thames River northeast of Dartford, a London suburb. A pilot tunnel was driven in 1937, and shafts and headings put down in 1938, but work on the main bore was halted when war was declared in 1939. The tunnel is to be 110 ft. below high-water level.

Germany—The continuing lack of bituminous binders and existing difficulties in procuring common labor and experienced personnel still handicap the maintenance of essential highways in the U. S. Occupational Zone, according to recent reports by U. S. authorities. Temporary steps have been taken to halt the rapid deterioration of the roads by use of substitute mixtures of sand, clay and gravel.

Turkey—A new ten-year development program for Turkish railroads is now under consideration by the Public Works Ministry. The new plan, officials said, would add some 2,400 miles to the existing 4,800 miles of trackage.

Brazil—The mayor of Rio De Janeiro has appointed a commission to recommend contract terms and routes for a city-owned subway system, according to local reports.

***Use Concrete Beams**—Repair of the Seine River bridge at Epinay, a few miles northwest of Paris (ENR Nov. 1, 1945, vol. p. 572) is being accomplished with the use of prestressed, prefabricated concrete I-beams. About 36-in. deep, the beams are installed longitudinally on 4-ft. centers after which their top flanges will be incased in the poured concrete road slab. The beams are about 40 ft. long and rest on timber pile bents capped with concrete. The Epinay bridge is in two parts, a short section of about 300 ft. connecting the south bank to an island and a longer section from the island to the north bank. It is the short section, destroyed by the Germans, that is being replaced; in the longer section the original cast iron arches suffered only minor damage and have been repaired. Eventually the short section now being built will be replaced by a three-span (82-133-82 ft.) concrete girder structure. In the meantime, however, one of the most important routes leading into and out of Paris will again be available to traffic. The work is being done by the Seine Depart-*



ment of the Services des Ponts et Chaussees, L. A. Levy, chief engineer.

Construction . . . .

England—According to official government figures, 1,453 new factories have been approved for construction in Great Britain since the end of the war, at an estimated cost of more than $248,000,000.

Mexico—Due to a continuing cement shortage, President Camacho recently offered special facilities to encourage the opening of new cement plants in this country. The treasury department has been instructed to prepare a scheme for exemption from certain taxes for all such plants.

Venezuela—A $2,000,000 brewery in Maracay, capital of the State of Aragua, is expected to be under way early in

(*Continued on page 6*)

***Capitol for Ecuador**—Two New York City architects recently were awarded first prize in a contest sponsored by the Ecuadorian government for design of a new legislative palace to be built at Quito. The winning plan calls for a nine-story edifice, 300 ft. long, to cost about $1,050,000. It will contain chambers for the Senate and House, a library, and various assembly rooms, offices, etc. Contest winners were Robert D. Burbank and Charles DuBose, of 525 East 89th St., New York, N. Y.*

DEVELOPMENTS BEYOND U.S. BORDERS

(*Continued from page* 5)

1947. The structure will be built for Cerveceria de Caracas.

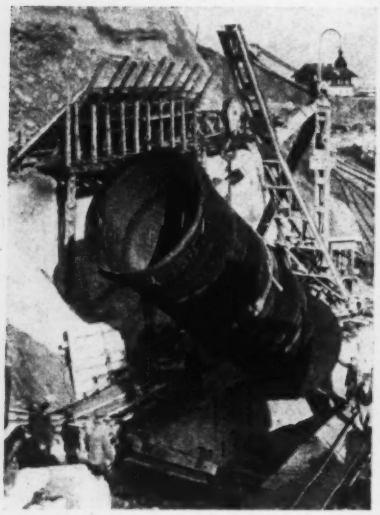
Austria—One of the many remaining sites for hydro-electric power development in the snow-capped Austrian Alps is now the scene of heavy construction activity as Austrian engineers —with the approval of the U. S. Army —rush work on the huge Kaprun Dam, in Salzburg province.

Already highly developed before the last war—Austrian hydro plants turned out some 2,450 million kilowatts in 1938—the Alps region was further intensively developed by the Germans during their long occupation of the country. In 1944, it was estimated that plants in this region turned out some 4,220 million kilowatts.

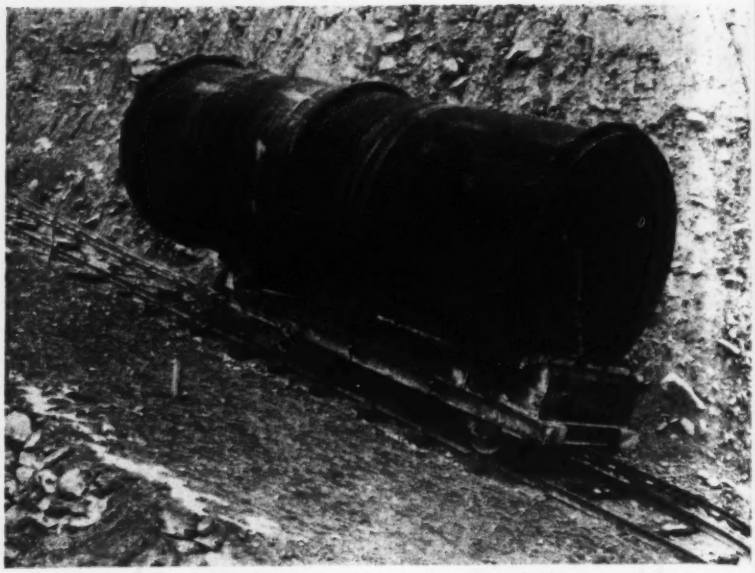
When completed—probably in four years—the Kaprun project and another project nearby known as the Clockner Works will have a combined capacity of 560 million kilowatts yearly.

The dam at Kaprun will be a concrete arch structure, 393 ft. high, 1,024 ft. long at crest, and the lake it forms will have a capacity of about 65,000 acre feet.

No overall estimate of cost has been made available, but Austrian sources indicate that first-year costs will total about $1,500,000.



A steel penstock section being moved into place at the foot of the dam. Steel for the project comes from Germany's Ruhr industrial center—some of it having been fabricated by the Germans for use on other projects.



Steel penstock section is transported to the dam site by a cable-towed car. Pipe is 9 ft. in diameter, and was originally made on the order of German engineers who sought to create a new, attack-free industrial power source for German war industry.

A scale model of the Kaprun Dam in the Austrian Alps indicates the sheer sides of the gorge in which the structure is to be located. Located near the old Austrian-Swiss border, the dam will be on a tributary of the Salzach River, at a point more than 6,000 ft. above mean sea level. *All photos by Acme*

Chicago receives more subway bids

Bids were received Aug. 29 for the construction of subway tubes to complete the Milwaukee Ave.—Dearborn St.—Congress St. subway in Chicago. The work involves 2,300 lin. ft. of double tubes in Congress St. between Dearborn St. and the east bank of the Chicago River, an underground turnback loop near the river, an open-cut crossover section east of La Salle and Congress Streets, and the construction of ventilation shafts and other auxiliary facilities for the subway system.

A low bid of $8,235,100 was submitted by Peter Kiewit Sons' Co. and S. A. Healy, joint venturers, of Chicago. Other bids were $8,754,200 by Michael Pontarelli and $8,962,800 by W. J. Boyle and Co., both of Chicago. Bids are being analyzed and a recommendation is expected to be made soon to the City Council by V. E. Gunlock, commissioner, Department of Subways and Superhighways.

Work stopped in 1942

Work on the Milwaukee Avenue—Dearborn Street—Congress Street subway was halted in 1942 by wartime restrictions. At that time the tubes had been completed from near Evergreen and Milwaukee Avenues to Dearborn and Van Buren Streets. From Lake and La Salle Streets east in Lake Street and then south in Dearborn Street to Van Buren Street, the tubes had been mined by two 150-ton shields by the S. A. Healy organization.

When work on this route was suspended, the city acquired title to the two shields. They now are nosed into the blue clay 40 ft. beneath the intersection of Dearborn and Van Buren Streets. The successful bidder will be permitted to use the shields in mining the tubes under Congress Street.

Construction of the 2,300 ft. of new twin tubes will require 2,600 tons of reinforcing steel, 400 tons of structural steel, 75,000 barrels of cement, 42,000 cu. yd. of gravel and 36,000 cu. yd. of sand.

An agreement has been made with the New York Central Railroad for construction of the subway tubes under the La Salle Street station. Use of the station will be maintained during subway construction operations.

Salvage old buildings

Work on the Milwaukee Avenue—Dearborn Street—Congress Street subway was resumed last spring near Evergreen and Milwaukee Avenues where the subway will connect with the Humboldt Park and Logan Square elevated lines of the rapid transit system. Construction of this incline connection is proceeding on schedule, Commissioner Gunlock said.

Before mining operations get under way, 20 buildings in the line of the subway and the Congress Street superhighway, between Dearborn Street and the river, are to be demolished for salvage. These buildings, most of them mill-type structures, have been purchased by the City to provide right-of-way for the subway and the superhighway. Wrecking operations are to be started soon.

On Sept. 19 bids will be received for the wrecking of 15 additional vacant and dilapidated buildings to clear the right-of-way for the new subway and superhighway. They are chiefly brick and frame construction. All reusable materials from the demolished buildings will be salvaged and sold for reuse in the Chicago area.

The Department of Subways and Superhighways also will receive bids, Sept. 12 for waterproofing that portion of the subway tubes completed before the war, including certain completed platform stations but not the mezzanine section of the stations.

Youngest member joins beach erosion board

The Corps of Engineers last week announced the appointment of Lt. Col. William B. Stelzenmuller, 32, as resident member of the Beach Erosion Board at Washington, D. C.

Col. Stelzenmuller

The youngest officer ever to hold this post, Colonel Stelzenmuller succeeds Col. William J. Ely, who joins the Armed Forces Staff College at Norfolk, Va. for duty with the staff and faculty.

Colonel Stelzenmuller, a native of Columbus, Ga., received a bachelor of science degree in civil engineering in 1938 at the University of Alabama, and in that same year was assigned as a second lieutenant with the Corps of Engineers. He served during the Pacific campaign with the 353rd Engineer Regiment, returning to the United States with his present rank.

PRA tentatively approves Baltimore expressway

Tentative approval has been given by the Federal Public Roads Administration to two sections of a proposed crosstown expressway in Baltimore, Md., Nathan L. Smith, chief city engineer, said recently.

The first two sections will extend from the southwestern city line to Ostend and Franklin streets. Formal approval will not be sought, Mr. Smith said, until detailed plans are ready for presentation.

The tentative approval was based on the preliminary plans and surveys for the two sections completed under the immediate direction of Harry D. Williar.

Four survey parties and eight draftsmen now are working on the preliminary plans and surveys for the third section, from Franklin street east to St. Paul street. The final section will be from St Paul Street east to the eastern city line.

Federal road-safety committee organized

Basic form of a 14-member Federal Committee on Highway Safety was set out in an executive order made public last week by President Truman "in the interest of promoting highway traffic safety."

The group is to be composed of one representative each from: the Public Roads Administration, Bureau of the Census, National Bureau of Standards. Federal Works Agency, U. S. Office of Education, Federal Bureau of Investigation, Department of Agriculture, Department of the Interior, the War and Navy departments, Post Office, Interstate Commerce Commission and the Federal Interdepartmental Safety Council. Additionally, other members may be added to represent such other federal departments as may be determined by the Commissioner of Public Roads, the Federal Works Administrator, and the committee chairman.

Chairman of the group is to be designated either by the President, or by the Federal Works Administrator at the President's direction.

The committee is charged with "the promotion of traffic safety and reduction of traffic accidents. It will encourage cooperation between federal and state highway agencies, coordinate activities of federal agencies, and cooperate with national, non-official highway organizations.

New law authorizes federal assistance for beach, shore erosion protection

American Shore and Beach Protection Association hear details of recently enacted bill at summer meeting

Ocean and lake front communities may now take advantage of a newly-signed law to ask federal participation in beach development and shore erosion protection projects, members of the American Shore and Beach Protection Association were told at a recent summer meeting at Sandusky, Ohio.

By coincidence, President Truman signed the new law (Public Law 727) just as the association began its sessions.

Passage of the act realizes nearly two decades of effort by the association and state and municipal officials, who have long contended that protection of coastal communities against the inroads of the sea is a parallel matter with flood control projects for inland communities.

Under the act the federal government may assist in the construction—although not the maintenance—of "works for the improvement and protection against erosion by currents and waves" of the shores of the United States, whether those shores are owned by the states, municipalities or other subdivisions.

The federal contribution to such works may not be more than one-third of the total cost. Additionally, the act provides that up to one third of the cost of repair of a seawall may be contributed, if the seawall was erected to prevent erosion endangering a public highway "considered by the Chief of Engineers sufficiently important to justify protection."

No directive ready

Colonel C. Lacey Hall, senior member, and Martin A. Mason, principal engineer of the U. S. Beach Erosion Board, told association members, however, that projects can only receive assistance after each separate plan has been specifically adopted and authorized by Congress, after investigation and study by the Beach Erosion Board. Both speakers pointed out, however, that they could make no specific statements about application of the new law to any given project until the issuance of an official interpretation of the provisions by the Office of the Chief of Engineers. They added that a task imposed on the board will be the establishment of a yardstick for measuring the differing degrees of federal, state and municipal interest in any given beach.

Other speakers at the session discussed local erosion problems along the Ohio shores of Lake Erie. This discussion included papers by Arthur E. Morgan, chairman of the Natural Resources Committee of the Ohio Post-War Program Commission, and U. S. Senator James W. Huffman of Ohio, both of whom suggested the formation of regional conservancy groups or other public agencies which could consider the problems on a larger scale than is possible to political subdivisions.

Another point of discussion was speculation on how the new law might be applied to communities where a large part of the shorefront was in private hands, since the law limits aid to be provided by the federal government to public property.

In this connection, the association released a statement from H. W. Ordeman, consulting engineer to the borough president of Richmond (Staten Island) New York, describing the procedure adopted some years ago when private beach front lands were converted to public lands to facilitate construction of a boardwalk and beach as a WPA project.

Mr. Ordeman said that by agreement with the owners, the city took title to a strip of land only one foot wide and 7500 ft. long along the beach front above high water levels, thus bringing all lands outshore from this strip under the jurisdiction of the city. This made it possible for the city to apply for federal aid for the improvement contemplated.

It was suggested that such a method—or some modification of it—could be adopted as a means of converting private lands to public ownership, thus qualifying it for aid.

Plan changes in iron soil pipe regulation

Two amendments to Premium Payments No. 8 which are of great importance to producers of cast-iron soil pipe are being drawn up at present, according to the National Housing Agency.

One amendment would provide financial relief to those producers who must buy their pig iron from companies which—because of unusual production costs—have received special permission from OPA to sell at higher than prevailing prices. Pipe producers could qualify for additional premium payments in this case. The other proposed amendment would adjust quotas downward in extreme cases during the conversion period required to produce smaller sizes of pipe. Both amendments would be retroactive to Sept. 1.

Engineers plan hearings on Coosa development

Plans for the multi-purpose development of the basin of the Alabama-Coosa River system were advanced recently with the announcement that the Corps of Engineers will hold public hearings on the program. Congress has already authorized appropriation of $60,000,000 to start this development.

First step in the plan will be the creation of a 9-ft. channel for navigation on the Alabama River between Mobile, Ala. and Montgomery, Ala. Subsequently, a similar channel would be built on the Coosa river between Montgomery, Ala. and Rome, Ga.

Col. Mark M. Boatner, Jr., district engineer at Mobile, said last week that plans are now far enough advanced to enable the holding of public hearings. He did not set a date for the hearings.

In connection with construction of the canals, four dams would be built, two relatively low and without power installations, and two others capable of developing hydroelectric power.

Let contract for Hawaii water supply tunnel

A new Honolulu, T. H. contracting firm—D and M Contractors, Ltd., last week was awarded a $441,000 contract to drive a two-mile water tunnel that is expected to develop from 1 to 5 mgd. from the Waianae mountains on Oahu.

The water will supply homesteads now subsisting on meager purchases from private owners, and will aid in the general expansion of the Honolulu suburban water system over the whole island of Oahu. The contract calls for a 5 ft. by 7½ ft. horseshoe tunnel with concrete bulkheads to carry a 16-in. water main to connect with the present water system. Tunnelling will be carried up to a maximum of 9,700 ft., but it is hoped to hit water at the one-mile mark and suspend the tunnel activities there.

The bid of D and M was said by Honolulu supervisors to be $300,000 below the only other bid submitted. The firm is composed of N. R. Dawley, president; and Richard H. Miller, vice president and general manager.

Reclamation construction awards total 109 million in fiscal 1946

All of contracts awarded before President's shutdown order —Major construction work centered in western area

Contracts totalling more than $109,000,000 were awarded by the Bureau of Reclamation for the fiscal year ending June 30, 1946—most of them during the last six months of the year, according to a report prepared last week by Commissioner Michael W. Straus.

The large total of contract awards reflects post-war resumption of natural resource development after the drastic curtailment of the war years, Mr. Straus said. All of the contracts, he added, were awarded prior to the August 2 order from President Truman and subsequent directives from the Office of War Mobilization and Reconversion which placed a moratorium on new public works until Oct. 1 of the current year.

Mr. Straus said that in accordance with these directives, construction projects of the bureau will be limited during the fiscal years 1947 and 1948.

Breakdown of figures

Of the total of contracts during the 1946 fiscal period, more than $55,000,000 in over 200 contracts were awarded during the month of June.

Largest single contract awarded in June was a $5,989,969 job for the construction of Granby Dam and dikes on the Colorado River, about 50 miles northwest of Denver, Colo., on the western slope of the Rocky Mountains. Part of the bureau's Colorado-Big Thompson project, the work was awarded to Granby Constructors, of Denver, a seven-firm coalition. The dam will be an earth-fill structure 885 ft. long at the top and 232 ft. above the river bed, providing 482,000 ac.-ft. of storage and producing 152,000 kw. of power.

Largest construction feature placed under contract during June was the Horsetooth Reservoir, also a part of the Colorado-Big Thompson job. Built about five miles southwest of Fort Collins, Colo., the $9,431,000 job includes construction of Horsetooth Dam and Satanka Dike, Soldier Canyon Dam, Dixon Canyon Dam and Spring Canyon Dam. The first three jobs were awarded to a joint venture composed of the Grafe-Callahan Construction Co., Hunther and Shirlet Co., and W. K. McIlyar, for $5,112,000. The last two jobs were awarded to a joint venture composed of Hinman Bros. Construction Co., and the partnership of Rhoades Bros. and Shotner, at $4,139,000.

Third largest award in June—for $5,079,900—was made to the Arizona-Nevada Constructors of Phoenix, for construction of 29 miles of the Friant-Kern Canal on the Central Valley Project in California.

During January, the bureau awarded its largest single contract—a $21,462,000 job—to the Utah Construction Co. of San Francisco, Calif., for construction of Davis Dam, on the Colorado River near Kingman, Ariz.

Calif. authority studies Central Valley control

The California Water Project Authority—set up recently by the state legislature—has declined to withdraw its 12-year-old application to the Federal Power Commission for permission to operate and maintain the Central Valley Project.

The federal agency had asked the state to withdraw the application, but officials said the authority is still "strongly considering" the possibility of state control of the development.

"Pursuant to the recommendation of a joint committee on water problems of the California legislature," the authority said in a resolution, "and also various agencies, public and private interested in the Central Valley Project, the authority has directed its executive officer to study and investigate a proposal that the water project authority be given control, or a measure of control, and management of the CVP." The study will require several months.

Clarify application for non-housing construction

The Civilian Production Administration last week announced that detailed instructions are now available to builders for filling out applications for authorization to do non-housing construction or repair work restricted under Veterans Housing Order 1.

The instructions are contained in Direction 2 to Order VEHP-1, and explain how to fill out Form CPA-4423, which must be filed with CPA in applying for construction authorizations.

Oklahoma City road plan awaits PRA approval

Action on the city proposal for arterial routes for inter-state highways in Oklahoma City, Okla., is awaiting approval by the Public Roads Administration.

H. E. Bailey, chief highway engineer, said the State Highway Commission and the PRA would pass on routes through the city after the engineering contract is approved.

False statements cause building shutdowns

The Compliance Division of the Civilian Production Administration last week announced a long list of buildings on which construction work had been halted, and other actions against contractors and suppliers for "false and misleading statements" in their construction applications.

Morris S. Verner, Jr., Compliance Director, warned that authorization to build will be revoked and construction stopped "in every case" where it is found that false and misleading statements of a material nature have been made.

Some examples

Mr. Verner cited the revocation of a construction authorization granted to a Washington, D. C. storekeeper, after it was proved that although the application stated the premises were being used for operation of a grocery and food store, they were in fact used solely for the sale of packaged liquor. Another case, in Seattle, Wash., brought a halt to construction of a family residence after it was found that the builder had only acquired a small amount of material although he had stated in his application that he had all material necessary for the project on hand when the application was submitted.

A Garfield Heights, Ohio, contractor was stopped from doing further work on a one story commercial building which was to have been occupied by a grocery, butcher shop and furniture store. In his application, the builder said that there were no other groceries or meat markets within eight blocks of the contemplated site. Actually, CPA said the neighborhood was served by seven grocery and meat stores.

Additionally, CPA said that it had halted construction work on a dog-racing track in Ohio, a tavern and gasoline station near Stanwood, Mich., a summer home in Eastport, Mich., and concrete piers for a sports grandstand in Burbank, Calif.

RANDOM LINES *from an editor's notebook*

. . . In which Missouri's solution to the problem of shortages of highway engineers and workmen is studied in detail

Faced with the necessity of conducting a large construction program this season with a limited number of field engineers, the Missouri State Highway Department has developed a new method of transferring engineers to the various survey, maintenance and construction projects throughout the state.

Results of the new system, after four months of operation, are reported to be quite satisfactory both from the standpoint of the department and its employees.

Briefly, the procedure involves three types of transfers for field engineers: (1) permanent transfer, (2) temporary transfer and (3) delayed permanent transfer.

Under a "permanent transfer," which involves establishing new field headquarters for a project or group of projects of long duration, the department pays all costs of moving the employee's furniture to the new headquarters and allows him one week's expenses upon reaching the job.

A "temporary transfer" is given an employee when the construction, maintenance or survey project is of such short duration as to not justify the expense of moving household furniture. In this case, the employee is reimbursed for his actual living expenses while on the job. Ordinarily he is assigned to a project close enough to his home to permit him to go home over the week-end.

In localities where the housing shortage is extremely acute, and the department decides to establish permanent field headquarters, the employee is given a "delayed permanent transfer." In this case the employee is reimbursed for actual living expenses until he can find permanent quarters. If he incurs dual rent costs, he is reimbursed for one month's rent.

Actual expenses (ordinarily board and room) are paid in all three types of transfers and no discrimination is made as to the rank of engineering employee involved. However, each employee and the employee in charge of a group of men are both charged with the responsibility of not abusing the privileges of his expense allowance.

Chief benefits of this system are that it materially increases the efficiency of its field engineering crews, permits the shifting of an employee from one project to another on almost a moment's notice, and increases the job-appeal for highway construction in Missouri. As to the employee—he has an increased sense of security through the establishment of a home and, if transferred from one project to another, maintains his "take-home" pay by eliminating duplicate living costs.

All in all, the Missouri State Highway Department has been steadily improving working conditions to retain its present employees and attract new ones as well. In addition to paying salaries that compare favorably with those of other midwestern highway departments, it carries workmen's compensation for all field employees earning $3,600 or less per annum. Each employee is entitled to two weeks vacation per year, and effective this year, it may be accumulated for two years.

Sick leave allowances

One of the greatest forward steps in personnel relations is a ruling on sick leave, inaugurated this year. The usual two-weeks sick leave per year which, in the past, has been non-accumulative, now is accumulative up to 100 working days and, in addition, it has been made retroactive for employees that have been with the department over five years. Thus, with the two weeks, or eleven working days, sick leave allowance for 1946, present employees who have been with the department for the past nine years or longer, have a sick leave credit of 100 working days minus the total number of working days they have been unable to work due to illness since Jan. 1, 1937.

Practically all personnel matters, including increases in salary and promotions are passed on by a personnel committee which is appointed by the chief engineer. A rating system is used to evaluate the various employees in all departments.

Trainee program

The highway department employs 30 engineers under the Veterans Administration program of "on-the-job" training. Four are in the bridge design office at Jefferson City and the others are assigned to the division offices, and to field survey and construction crews.

Considerable care is taken in selecting trainees to secure only those who show promise of substantial advancement. To do otherwise is considered unfair to the trainee as his ultimate earning capacity necessarily would be limited and such practice eventually would develop an over-abundance of men who are incapable of advancing beyond the lower engineering ratings.

In general, all trainees must have had at least one year of college training. Those with one year of college usually are hired as rodmen for $125 per month and trained as instrument men. Some with two years of college are being employed as instrument men at $180 per month and trained for the job of assistant project engineer.

No special courses are given the "on-the-job" trainees but the engineer in charge is requested to instruct and otherwise develop each trainee.

Despite the loss of several key men in the bridge office—due largely to more lucrative employment offered by private enterprise—the bridge department has managed to keep pace with its schedule of lettings, to date. However, there is some question whether this tempo can be maintained unless there is a decided improvement in the employment situation.

Some bridge design work has been contracted to consulting engineers. One noticeable example is a rather long viaduct structure in one of the state's larger metropolitan areas, estimated to cost nearly $500,000.

The actual cost of plans was estimated, based on the number of man hours required to design and detail the structure, and an agreed hourly rate per man-hour. The total net cost of plans then was increased 100 percent to allow for overhead and profit. All preliminary surveys and foundation tests were made by state forces, which also will furnish inspection on construction.—*J.R.C.*

WAB MUST APPROVE TRAVEL EXPENSES

A statement relative to the control of construction wages, printed in *Engineering News Record* Aug. 22, vol. p. 215, requires further clarification, according to the Louisville, Ky. Chapter of the Associated General Contractors of America, Inc.

Listing the bases on which contractors may now pay construction labor without specific approval of the Wage Adjustment Board, the story said:

"(6) travel expense, subsistence or other premium compensation, if they were the employer's practice in 1942 or have been approved by him. The AGC officials pointed out that the phrase should more correctly read: ". . or have since been approved *for him by WAB*."

West Virginia removes tolls on three bridges

Late in August two bridges on the state highway system of West Virginia were made free of tolls, according to George W. McAlpin, state highway construction engineer. One of these bridges is the crossing spanning the Kanawha River at the town of Chelyan 13 miles above Charleston and connecting U. S. Route 60 and State Route 61. The other is that carrying State Route 41 across the New River at the town of Prince.

Earlier in the year the bridge over the Kanawha at St. Albans, 14 miles below Charleston, was freed of tolls. This structure connects U. S. Route 60 with State Route 25.

Freeing of the three structures leaves tolls collected at only one bridge on the state's 30,000-mile highway network (which includes a great many miles of country highways) under supervision of the State Road Commission of West Virginia. This structure spans the Kanawha River in Fayette County at the village of Cotton Hill and is located on State Route 13, which is of secondary importance.

Tolls continue to be collected on a number of bridges over the Ohio River and connecting West Virginia with Ohio. However, two of these bridges are scheduled to be made free of tolls in December of this year. One of these structures is located on U. S. Route 21 and connects the cities of Williamstown, W. Va., and Marietta, Ohio, and the other carries U. S. Route 50 across the Ohio River at a point near the city of Parkersburg, W. Va.

California asks bids on Bay Shore highway

California has called for bids on the first major unit of the reconstruction of Bay Shore Highway as a divided highway and freeway, a project for which $14,000,000 already has been approved.

The work includes relocation of the miles of a 6-lane divided highway between Colma Creek in South San Francisco and Broadway Ave., Burlingame. The roadway will be 124 to 130 ft. wide, with two roadbeds each 52 ft. wide separated by a division strip that will vary from 20 to 26 ft.

The unit includes relocation of the highway westward from its location at the San Francisco airport, Mills Field, to a route which will permit expansion of the airport across the present highway right-of-way.

The long-planned freeway, from downtown San Francisco to Peninsular Ave., San Mateo, will be built on a piecemeal basis. Those sections in which construction will necessitate condemnation of housing will be delayed as long as possible.

"We have to go mighty slow about evicting anyone in this area of housing scarcity," Barney W. Booker, assistant district engineer of the state highway division, explained.

The jigsaw portions completed will be opened to traffic as soon as practicable, Booker said, but the entire freeway section probably will not be ready for use until 1949.

Oversized loads barred from North Carolina road

The North Carolina Highway and Public Works Commission has ruled that movement of large sections of dismantled barracks and houses over state highways by trucks is dangerous to travel and must be stopped.

Chairman A. H. Graham and State Highway Engineer W. Vance Baise, have been instructed to disapprove all future movements of this kind.

Commissioner T. Max Watson said that commercial firms have been moving dismantled housing from Camp Davis as far west as Cullowhee and Brevard.

Form division to aid civil hospital building

Formation of a Division of Hospital Facilities to assist the Surgeon General in carrying out provisions of the Hospital Survey and Construction Act was announced recently by the U. S. Public Health Service.

This division will absorb the functions of the Hospital Facilities section of the States Relations Division, Bureau of State Services, which was abolished simultaneously with the creation of the new division. Its duties will include assistance to the states, their political subdivisions, and non-profit organizations in matters relating to the study, construction and operation of hospitals.

The work will be done to aid the states in accordance with the act which authorized some $375,000,000 to be divided among the states and spent during the next five years for construction of hospitals and health centers. The money was not appropriated at the recent Congressional session, however.

Texas farmer invents rice-cement block

What is said to be a new-type building block, 5x8x12 in. in size, composed of six parts of rice hulls and four parts of rice ash, and held together by common cement, has been invented and patented by a rice farmer of El Campo, Tex.

The inventor, Leonard Chappell, and his partners, who include Robert I. Koons, a construction man of Wharton, Tex., claim that the new block can be sawed with a hand saw as though it were wood; will not burst into flame under blowtorch heat; will not harbor termites; and will hold nails or screws securely.

The group recently conducted a series of demonstrations at El Campo, testing the block with blow torches. The block, reports said, did not char, although it showed some pitting due to pressure. The backers said that enough blocks to build a 5-room house would cost about $1000.

Big VA hospital planned for St. Louis area

The Veterans Administration has announced plans to build a 1,000-bed general medical and surgical hospital in the St. Louis, Mo. area. No definite site for the project has as yet been selected.

VA also made public a change from its original plan to build a 500-bed neuropsychiatric hospital in the St. Louis area. It is now proposed to use a 597-bed general medical hospital at Jefferson Barracks, near St. Louis, for this class of patients and to add 500 beds to the project—making it a 1,097-bed establishment.

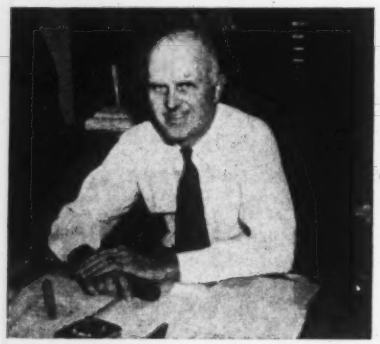
Contracts for 23 others

The Army Engineers and the Veterans Administration have worked out a program of size and type requirements for new hospitals to be built, and architect-engineer contracts have been let for 23 hospitals and contracts for 17 more are pending.

The locations of the hospitals are as follows: Brooklyn, Albany and Buffalo, N. Y.; Big Springs, Tex.; Decatur, Ill.; Iron Mountain, Mich.; Fresno, Calif.; Louisville, Ky.; Cincinnati, Ohio; Kansas City, Mo.; Manchester, N. H.; Miles City, Mont.; Newark, N. J.; Omaha, Nebr.; Seattle, Wash.; Shreveport, La.; Altoona and Wilkes Barre, Pa.; Wilmington, Del.; Birmingham, Ala.; and Charlotte and Durham, N. C.

MEN AND JOBS

Pausing for refreshment are Don P. Reynolds (left) assistant editor of "Civil Engineering" and S. Boyd Downey, structural engineer for the Pennsylvania Water and Power Co. Occasion for the beer, the shirtsleeves and the general air of informality is a recent get-together of the District of Columbia Section, ASCE.



John L. Wentworth has been city engineer of Roanoke, Va., since 1940, and an employee of the city's engineering department since early in 1924.

Army engineers Walter Grimes and Jacob Fischer (in foreground) and geologist Clair Holdredge inspect the site of the proposed Pine Flat Dam on King's River, near Fresno, Calif. Construction of the dam has been held up pending repayment agreements for water users (ENR August 15, vol. p. 205).

Raymond W. Coburn, of Newton, chief engineer for the Massachusetts Department of Public Works, has resigned to become engineer in charge of construction jointly financed by state, counties and municipalities. **Philip H. Kitfield** of Swampscott, has been appointed acting chief engineer by Public Works Commissioner Joseph F. Cairnes. Mr. Coburn was named chief engineer following the removal of William F. Callahan. Mr. Kitfield, an employee of the department for 25 years, is a civil engineering graduate of Dartmouth University.

Thomas E. Balck, 1938 engineering graduate of Washington State College has been named district engineer for the Bonneville Administration's Mid-Columbia district. During the war he was instructor in the Army's specialized training course at Oregon State College before going to Okinawa and Korea.

A. D. Stanley of Boise has been appointed a member of the Idaho public works contractors license board by Gov. Arnold Williams. Former assistant state director of highways, he succeeds **Dan J. Cavanagh,** Twin Falls contractor, who resigned.

Edwin M. Greenwood, after discharge from the Navy, has joined the U. S. Forest Service as project engineer, Denver, Colo.

Henry A. Yancey, city manager of Greensboro, N. C., since 1943, has been appointed city manager of Charlotte, N. C. He had previously been city manager of Charlottesville, Va., Petersburg, Va., and Durham, N. C.

Roy M. Harris, chief of the engineering division of the Washington State Department of Health since 1933, has left to become chief sanitary engineer for the Standard Oil Co. of New Jersey, holding company for all the firm's foreign properties. His first assignment will be in Venezuela.

Ralph D. Kircher, Jr., a 1940 engineering graduate of the University of Michigan, and a captain in the Corps of U. S. Engineers in the Pacific for three and a half years, is now at Manila, P. I., as chief engineer of construction for the Standard Vacuum Oil Co.

Col. A. Riani, district engineer at Detroit, Mich., announces that **Maj. Russell Vincent,** Corps of Engineers, has reported for duty as an assistant. Major Vincent is a graduate of the University of Washington and served as the commanding officer of the first Military Government detachment center Germany.

L. Deming Tilton, San Francisco planning director, has resigned, effective Oct. 1, to enter private practice as a consulting engineer.

Roy H. Parsons, a graduate of Michigan State College, has retired as city engineer of Peterborough, Ont., where he had served for over 33 years. His successor is **A. E. Chalmers.** Mr. Parsons has served as president of the Canadian Institute on Sewage and Sanitation.

Ray R. Best, Tule Lake, Calif., has been appointed district engineer of the newly-created Klamath district of the Bureau of Reclamation. Formerly with the War Relocation Authority in charge of the Tule Lake center for Japanese, he will establish headquarters at Klamath Falls, Ore.

Leonard H. Dicke, major, Corps of Engineers, after over 4 years in service, has returned to the U. S. Engineers as a hydraulic engineer in the Los Angeles district. He was formerly employed at the St. Paul district for 9 years.

O. J. S. Ellingson has been appointed city manager of Key West, Fla. A graduate of the University of Texas with a civil engineering degree in 1906, Ellingson served in various engineering positions through the West and Mid-west before becoming city engineer of Sherman, Tex., in 1915. The following year he was named city manager.

Fred A. Von Eberstein, Sr., has retired from the Seattle District Army Engineer Office after 12 years as a construction engineer with the government. His last post was as chief of the materials cost and survey section.

V. G. Rinehart has been appointed Yakima district construction engineer with the Washington State Department of Highways. He succeeds **T. Rod Ross,** who was recently transferred to the Spokane district.

A. W. Green and **H. T. Harstad** have formed a consulting engineering

firm with offices in Tacoma and Seattle, Wash. They will specialize in water supply, sewage systems and industrial waste problems. Green, formerly senior state sanitary engineer, most recently was with the Hooker Electrochemical Co. at Tacoma. Harstad, recently discharged from the Coast Guard as a lieutenant, has served as Pierce County sanitary engineer at Tacoma and was engaged in soils studies for the Seattle District Army Engineers.

James I. Metcalf has joined the staff of Harza Engineering Co., Chicago, Ill., as power economist in charge of the rate and system analysis section. Mr. Metcalf, recently released from Naval duty, was formerly a partner in the engineering firm of R. W. Beck, James I. Metcalf & Associates, and was consulting power economist for the Bonneville Power Administration and the New York Power Authority.

E. W. Downward is new city engineer at Little Falls, Minn.

Harry Paine has moved from Bagley, Minn., to become county engineer of Beltrami County, Minn.

Harold G. Garner, civil engineering graduate of Missouri University, is now technical paving engineer for the Portland Cement Association at Topeka, Kan. From 1930 to 1940 he was division soils engineer for the Missouri State Highway Department at Kansas City and the following six years he was paving engineer for the Portland Cement Association, first being located at Lincoln, Neb., and then in Washington, D. C. In his new position Mr. Garner will cover the state of Kansas.

B. Loyal Smith, Walla Walla County engineer at Walla Walla, Wash., before the war, has been named again to that position. He succeeds **Nelson M. Collier,** who resigned. Smith received his engineering degree at the University of California.

Eugene T. Moore, Belmont, Ill.; **Forrest H. Starr,** Springfield; and **Vincent Vanni,** Mt. Pulaski; have recently joined the hydraulic section of the Illinois Division of Waterways, Springfield, Ill.

Albert E. Fellers has been appointed city manager of Cadillac, Mich. He was formerly an engineer with the Michigan Highway Department, and his last position was with the Lansing Engineering Co.

Col. Roy D. Burdick, Corps of Engineers, has retired and has opened an office as a consultant on water control projects, stream drainage reports and general civil engineering, at Little Rock, Ark.

John H. Melvin has been appointed district geologist, U. S. Engineer Office, at Omaha, Neb., where he will be engaged in the geological engineering phases of the Missouri River development program.

John M. Anderson has resumed his duties as a field structural engineer with the Structural Clay Products Institute, of Ames, Iowa. He served 3½ years in the Army and is an engineering graduate of Iowa State College.

Col. James R. Pollock, former city manager of Flint and Pontiac, and now on terminal leave after service with the U. S. Army Corps of Engineers, has been appointed the first city manager of Marquette, Mich.

E. R. Hensch, lieutenant, USNR, and recently a graduate student in civil engineering at the University of Minnesota, has joined Toltz, King and Day, engineering and architectural firm of St. Paul, Minn.

Harry B. Wildschut, former division engineer for the Buffalo sewage project, has been appointed city engineer for the city of Wauwatosa, Wis.

Yuba City, Calif. has named **Hugh Stone** city engineer to succeed the late Leon Bunce.

Annual meeting of the Congress on Surveying and Mapping brings together G. Brooks Earnest (left) professor of engineering surveying at Case School of Applied Science and Howard G. Sharp, acting head, department of civil engineering at Rensselaer Polytechnic Institute.

Bob Pomeroy (right) vice-president of J. H. Pomeroy and Co., Inc. is in charge of construction of a $1,900,000 highway bridge near Marysville, Calif. With him is Harry Carter, resident engineer for the California Division of Highways.

Planning a headquarters for their organization at Milwaukee, Wis., a group of engineers recently visited the headquarters of the Engineering Society of Detroit in search of design pointers. Posing with their hosts they are (front row): Ernest Szekely; Edwin W. Seeger, president of the Wisconsin Society of Professional Engineers; Lawrence E. Peterson, and Ervin L. Knebes. Hosts, (back row) are: Donald L. Trefry; Stephan G. Szabo, president of the Michigan Society of Professional Engineers; Frank G. Horton; Edward J. Outley, and Ivan N. Cuthbert.

ENGINEERING SCHOOL NEWS

Many faculty changes in engineering institutions—Shortage of instructors may reduce enrollments in some schools

Martin P. Capp, formerly assistant professor of civil engineering at the Colorado School of Mines, has been appointed head of the department of civil engineering and associate professor of civil engineering at the University of Denver. His private employment record includes service with the American Bridge Co. at Gary, Ind., and with the Denver Builders, as draftsman and structural engineer. He received his bachelor of science degree in architectural engineering from the University of Colorado in 1935, and his master of science in civil engineering from the University of Colorado in 1936.

New instructors, added to the faculty of the college of engineering of the University of Dayton, Dayton, Ohio, are:

Chester Wolowicz, associate professor of mechanical engineering. He holds degrees from Northeastern and Harvard.

David Duryea, engineering drawing. He is a graduate of Stevens Institute of Technology.

Roy Wehmanen, a Navy veteran, is a graduate of Northern Michigan College, where he majored in mathematics and industrial arts.

Dean S. B. Earle, head of the Clemson College School of Engineering, South Carolina, has announced seven new members of the engineering faculty. They are Leonard C. Adams and John C. Buttner, instructors in electrical engineering; Charles A. Dewey, professor of mechanical engineering; Ralph W. Fowler, associate professor of electrical engineering; Edward S. Giles, assistant professor of electrical engineering; James T. Long, instructor in electrical engineering; and Hubert L. Morgan, assistant professor of electrical engineering.

Other new members of the engineering faculty, or former members who have returned from the services, are: Carl M. McHugh, instructor in drawing; Henry G. Ballard, instructor in electrical engineering; Douglas S. Crouch, Jack Q. Lever, and Robert W. Moorman, instructors in civil engineering; and Robert St. Hubert, visiting professor of architecture.

The College of Engineering at the University of Colorado expects 1600 students in the fall term, double the enrollment of pre-war days. To take care of this increase, thirty-five new members have been added to the engineering faculty, with many more vacancies to be filled. Some of them are as follows:

Lt. Col. Harold W. Sibert, adviser for the Army Air Corps on technical problems of aerodynamics, has been appointed professor of aeronautical engineering, to help Professor K. D. Wood, head of the newly organized aeronautical department. Sibert was professor of aeronautical subjects at the University of Cincinnati before entering the Army.

Also added to the aeronautical staff is Capt. Allen R. Deschere, of the Army ordnance department at the Aberdeen Proving Grounds.

The Mathematics department has added nine men to the staff; but Professor Hutchinson, the head, states that altogether twenty new teachers will be needed. Besides the new instructors are Professor Karl Stahl and Commander Vincent Moore. Professor Stahl has a Ph.D. degree from the University of Pittsburgh and has been head of the Mathematics department at State Teachers College in California, Penn.

Among the four new instructors in engineering English is Harold Hawk, who has spent many years in the business world as an advertising expert and executive, in addition to being a writer and a traveler.

Wayne Beattie has been appointed to the post of acting head of the mechanical engineering department to replace Norman Parker, who is going to the University of Illinois in a similar capacity. Both Beattie and Parker are Colorado men.

Under Parker's administration since 1940, the department has built up to include a much larger staff and a modern shop system. In addition, a department of Aeronautical Engineering was established in 1944, with Professor K. D. Wood as head. Two new assistant professors in the department are Phil Moore and Allen Deschere; William Shutts is serving as instructor.

The residential area of the University of Illinois, is facing a major shortage in homes for faculty and staff members. The engineering staff of the University of Illinois, was short 18 instructors, as of Aug. 28, and the staff may have to be decreased even more because of the acute lack of home accommodations near the campus. M. L. Enger, dean of the college of engineering, say that each decrease of faculty members, will mean a loss of between ten and 100 students, depending upon the scope of the work that had been offered.

A. A. Jakkula has resigned as professor of structural engineering and vice-director of the Texas Engineering Experimental Station at the Agricultural and Mechanical College of Texas to become director of research, Texas A. & M. Research Foundation.

The foundation is an independent organization created in 1944 to promote research and graduate study at the A. & M. College of Texas by means of sponsored research and gifts. Dr. Jakkula is the first director of research. Since the organization of the foundation its activities have been directed by Dean H. W. Barlow.

Calendar of Meetings

NATIONAL

Institute of Traffic Engineers, annual meeting, Deshler-Wallick Hotel, Columbus, Ohio, Oct. 3-5.

Federation of Sewage Works Associations, 19th annual meeting, Royal York Hotel, Toronto, Canada, Oct. 7-9.

American Society of Civil Engineers, fall meeting, Continental Hotel, Kansas City, Mo., Oct. 16-19.

Associated General Contractors of America, Inc., fall meeting, Benjamin Franklin Hotel, Philadelphia, Pa., Oct. 21-22.

National Council of State Boards of Engineering Examiners, 25th annual meeting, Hotel Statler, St. Louis, Mo., Oct. 27-29.

American Institute of Steel Construction, annual convention, Del Coronado Hotel, Coronado, Calif., Oct. 28-31.

REGIONAL

American Water Works Association, Southwest Section, Buccaneer Hotel, Galveston, Texas, Oct. 14-17.

American Water Works Association, New England Section, Parker House, Boston, Mass., Oct. 17.

American Water Works Association, West Virginia Section, Hotel Morgan, Morgantown, W. Va., Oct. 17-18.

American Water Works Association, California Section, Whitcomb Hotel and Civic Auditorium, San Francisco, Calif., Oct. 23-25.

American Water Works Association, Kentucky-Tennessee Section, Andrew Johnson Hotel, Knoxville, Tenn., Oct. 28-30.

Pennsylvania Water Works Association, Golden Anniversary meeting, Hotel Traymore, Atlantic City, N. J., Oct. 15-18.

American Water Works Association, West Virginia Section, Hotel Pritchard, Huntington, W. Va., Oct. 24-25.

Plan building program at University of Alabama

The University of Alabama at Tuscaloosa has announced a $4,120,000 permanent building program to provide facilities that will permit the state university to maintain its present record-breaking enrollment of 8,000 students.

The announced program included:

Six dormitories and a dining hall, estimated cost $1,920,000; science hall, $574,000; physical education development, including a $400,000 field house, $515,000; arts and science building, $418,000; engineering building, $340,000; infirmary, $230,000; utility and service plant, $112,000; fire training station, $40,000.

The university is at present rushing to completion a $6,500,000 emergency veterans' housing project, including conversion of the former Northington General Hospital, acquired by the school.

Building tops $12 million at U. of Maryland

More than $12,000,000 will be spent on buildings currently under way and projected at the University of Maryland at College Park, Baltimore, the Princess Anne Academy for Negro Students and the University Hospital, according to H. C. Byrd, president of the university.

A dozen major buildings, estimated to cost $4,000,000, will comprise the Glenn L. Martin College of Engineering and Aeronautical Sciences. The first unit—a wind tunnel—is under construction now. More than $2,000,000 will be spent for enlarging the university hospital and construction of a psychopathic hospital to be operated as part of the present establishment. Every effort is to be made to complete the major buildings within a year.

Florida allots $1 million for university buildings

Florida has allocated $1,200,000 for the construction of a gymnasium-auditorium for the University of Florida, and $150,000 to provide facilities for 1,000 university students who will attend classes under Florida State College for Women instructors at Tallahassee. The allocation was made out of the state's building funds.

The State Board of Control was authorized to issue $250,000 in revenue certificates against pledges of student fees and receipts of the Athletic Association to equip the new building.

Steel priorities held to housing needs

To insure even distribution to all manufacturers, priorities assistance on steel during the fourth quarter of this year will be confined mainly to a restricted list of critical items required for the veterans housing program and a few other urgent needs, the Civilian Production Administration said last week.

These special needs will not require more than a small percentage of the estimated 14,500,000 ton fourth quarter production, CPA said, with the heaviest demands in lighter gage sheets. On the West Coast, however, rated tonnage may account for a considerable portion of the total output, but in any event will be limited to not more than 50 percent.

John C. Houston, deputy CPA administrator, said that investigation of applications received since re-institution of assistance under Priorities Regulation 28, showed that most of the applicants were receiving adequate amounts of steel at present, but were asking for priorities as an "insurance policy" for future deliveries. He indicated that most of the requests already received that fell into this category would be denied.

Large electric station for Jackson, Miss.

Plans for construction of a 30,000 kw. steam-electric generation station by the Mississippi Power and Light Co. five miles north of Jackson, Miss., at an estimated cost of $4,500,000 have been announced by Rex I. Brown, president of the company.

The plant, part of the company's $20,000,000 expansion program, will be near an existing 110,000-volt North Jackson substation. It will follow the new semi-outdoor design which includes a minimum of housing, will use natural gas and will receive its water supply from two deep wells of 500-gallon per minute capacity. It is anticipated that the plant will be completed in mid-1948.

The station will consist of one 30,000 kilowatt unit, one 13,000 volt steam turbine generator unit and one 350,000 pound-per-hour outdoor type gas-fired steam boiler, provided with oil standby facilities.

The annual output of the station, if operated at full capacity, would be approximately 275,000,000 kilowatt hours of electricity. The entire plant is designed for multiple units for possible further expansion.

Reviews anti-trust cases in construction industry

Attorney General Tom C. Clark has met a request of the Senate Small Business Committee for information on anti-trust cases in the construction industry by preparing a factual review of the history of such actions since passage of the Clayton Act in 1914.

The report, available from the Government Printing Office, Washington, D. C., points out that 160 of the 675 anti-trust cases of the past 30 years have involved restraints of trade in the construction industry. Timber products and electrical supplies lead in number of cases. Excepting actions involving restraints by labor unions, anti-trust cases have generally been decided in favor of the government. These have covered such matters as control of production and prices through patents, the use of bid depositories as price-fixing devices, distribution control through detailed statistical reports by trade associations, identity of delivered prices as in the cement industry, and agreements between producers and labor unions.

Halifax, N. S., building men get pay raises

With approval of a joint application by the construction firms and labor unions in the building trades in Halifax, N. S., for a 40-hour working week at the same take-home pay as at the 44 hours, all work on Saturdays has ceased, affecting about 3,000 skilled workers and about the same number of unskilled helpers. In the application to the regional labor board, only the skilled workers were represented, and as this would penalize the unskilled workers, the contractors, decided to raise the wages of the unskilled workers to offset the 4 hours work they will lose.

Shift NHA research activity director

Harold D. Hauf, who has been director of the technical branch of the National Housing Agency since June of this year, has been recalled by Yale University to become acting chairman of the school's department of architecture.

William V. Reed, formerly director of the planning division of the technical branch, has been appointed to succeed Mr. Hauf. Mr. Reed, a graduate of the University of Illinois and M.I.T., is a licensed architect.

OBITUARY

Clem W. Wright, 62, civil engineer of Atlanta and Manchester, Ga., died Aug. 27. Mr. Wright was instrumental in organizing the Georgia State Highway Department and was active in the department until a few years ago when he retired.

Houston Coates, 61, county engineer of Hamilton County, Ohio, for the last five years, died Aug. 31, in Cincinnati. He began work in the office in 1902. From 1907 to 1936 he was a deputy county surveyor.

George A. Skilton, 62, civil and mechanical engineer and construction supervisor, died in Louisville, Ky. Aug. 27.

Roy S. Johnson, Sr., 61, superintendent of flood control at Memphis, Tenn., for 41 years, died in that city Aug. 28.

George L. Pearl, former Shasta County and Redding, Calif., engineer, died Aug. 6 in Redding. He had been acting as chief engineer for the extension of the Pacific Telephone and Telegraph Co.'s line from Oroville to the Oregon line.

Howard H. Alger, 67, for many years a structural engineer, died at Westfield, N. J., Sept. 1. He attended the University of Michigan and was associated with the Turner Construction Co. of New York as an engineer for 26 years before he joined James Stewart Associates of New York, for whom he served as engineer in the construction of the United States Naval Air Station at Trinidad. In recent years Mr. Alger had been with the National Lead Co. of New York.

Norman E. MacCallum, 83, retired plant superintendent and prior to that chief construction engineer for the Phoenix Iron Co. of Phoenixville, Pa., died Sept. 3 at Phoenixville. A native of Manchester, England, Mr. MacCallum was associated with the Phoenix Co. from 1901 until his retirement in 1941. He was the inventor of a number of improved steel processes widely used.

Samuel W. Lamborn, 63, civil engineer, who designed the subway and elevated cars used on the high speed lines in Philadelphia, Pa., died in that city Aug. 24. Mr. Lamborn at the time of his death was assistant designing engineer for the Philadelphia Department of Transit.

Raymond V. Moore, 48, president of the Cardinal Construction Co., East St. Louis, Ill., died Aug. 24. His company is engaged in completing earthworks for the State of Illinois, also roads, subways, and pump houses in Calhoun and Madison counties and in numerous cities in that area.

Hunter Leftwich, civil engineer, with the Tennessee State Highway Department 13 years as senior designer for that department, died in Nashville, Sept. 1.

Daniel Downey, civil engineer who with his brother, the late James Downey, helped build the Southern Railroad between Birmingham, Ala., and Atlanta, Ga., died Aug. 27 in West Palm Beach, Fla.

Edward J. Landor, 91, construction engineer and bridge designer, who retired 15 years ago, died in Canton, Ohio, Sept. 3.

Edwin H. Maegli, 57, contracting engineer for the Wisconsin Bridge & Iron Co. of Milwaukee, died Sept. 1. He had been with the firm since 1905.

Albin S. Gustafson, for many years a construction engineer with the Northwestern Terra Cotta Co., Chicago, Ill., died Sept. 2.

William F. McCarthy, 75, an engineer in the Cook County, Ill., highway department, died Aug. 31.

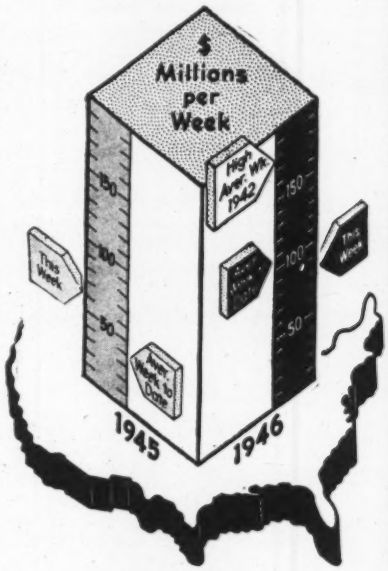
John David McGann, 48, consulting engineer, died at Harrisburg, Pa., Sept. 2.

Richard L. Ellison, 88, a retired building contractor, died in Kansas City, Mo., Aug. 24. He had been in building contracting work in that city for more than half a century.

Daniel J. Minahan, 49, state division engineer for the Wisconsin Highway Commission at Madison for the last 23 years, was killed in an automobile accident Aug. 29.

Mr. Minahan, who received his B.S.C.E. degree in 1921 from the University of Santa Clara, Calif., worked two years for the California state highway department, and joined the Wisconsin state highway department in 1923. In 1929, he was appointed assistant division engineer.

CONSTRUCTION ACTIVITY



As Reported this week to...
Engineering News-Record

CONTRACT VOLUME

Continental U. S. Only
(Thousands of Dollars)

	Week of Sept. 12 1946	Cumulative 1946 (37 wks.)	Cumulative 1945 (37 wks.)
Federal	$1,663	$519,126	$663,38[illegible]
State & Mun.	30,116	995,818	236,53[illegible]
Total Public	$31,779	$1,514,944	$899,92[illegible]
Total Private	54,387	2,367,392	452,326
U. S. Total	$86,166	$3,882,336	$1,352,249

WHERE CONSTRUCTION ACTIVITY ORIGINATED THIS WEEK

Dollar Volume (Thousands)

Type of Work	This Week	Cumulative 1946 (37 wks.)	Cumulative 1945 (37 wks.)
Waterworks	$3,482	$73,651	$39,15[illegible]
Sewerage	2,465	71,165	22,74[illegible]
Bridges	2,130	98,113	22,95[illegible]
Highways	18,628	577,206	155,67[illegible]
Earthwork, Waterways	797	291,693	35,82[illegible]
Buildings, Public	3,680	278,309	407,94[illegible]
Industrial	30,867	741,879	287,17[illegible]
Commercial	18,679	1,473,319	109,87[illegible]
Unclassified	5,438	277,001	270,90[illegible]

NOTE: Minimum size projects included are: Waterworks and waterway projects, $22,500; other public works, $40,000; industrial buildings, $55,000; other buildings, $205,000.

NEW PRODUCTIVE CAPITAL

	Cumulative 1946 (37 wks.)	Cumulative 1945 (37 wks.)
NON-FEDERAL	$1,151,464	$560,948
Corporate Securities	332,938	117,582
State and Municipal	593,526	279,766
RFC Loans	.....	24,600
REA Loans	.....	60,000
Fed. Aid Highway	225,000	79,000
FEDERAL	1,672,982	1,049,898
Total Capital	$2,824,446	$1,610,846

ENR INDEX NUMBERS

Index Base = 100		1913	1926
Construction Cost	Sept. '46	360.19	173.14
Building Cost	Sept. '46	272.04	147.06
Volume	Aug. '46	258	113

CONSTRUCTION REPORTS

Bids Asked — Low Bidders — Contracts Awarded

(Daily service also available—Write for details)

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ELSIE EAVES, Manager *J. A. MAHONEY, Reports* *J. V. McEWEN, M. R. ROESSLER, Statistics*

WATER SUPPLY

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked September 16

Va., Brodnax—Town, water supply and distr. sys., elevated steel water storage tank. Plans deposit $10. R. S. Royer, 207 Exchange Bldg., 6 and Franklin Sts., Richmond, consult. engr.

Ont., Port Hope—City, G. W. Garnett, chn., Waterworks Comn., 3,500 lin. ft. 6 in. water-main and 1,700 lin. ft. 4 in. fiber pipe house drain. About $30,000. Gore & Storrie, 1130 Bay St., Toronto, engr. CD 4/15.

Bids Asked September 17

Ind., Griffith—Town Bd., water treatment plant, $40,000. Plans deposit $10. L. Besozzi, 5217 Hohman St., Hammond, engr. CD 7/19—ENR 8/8.

Bids Asked in Late September

Tex., Omaha—City, City Hall, WW imprvs. Approx. $50,000. Freese & Nichols, 407 Danciger Bldg., Fort Worth, engrs. CD 8/23/45—ENR 9/6/45.

SOON LETS CONTRACT

Tex., Richardson—J. M. Cardwell, B. B. Owens and E. Byers, Richardson, soon lets contract 3 mi. 10 in. ci. water lines. $32,000.

LOW BIDDERS

Ark., Corning—City, rejected bids Aug. 22, WW sys. CD 8/15.

Calif., San Francisco—P. Utilities Comn., City Hall, Aug. 29, laying c.i. mains in Apparel City, Spec. 428, from Edwin J. Tobin, 1000 Charleton St., Berkeley. **$50,430.** CD 4/7.

Conn., Newington—Hartford Metropolitan Dist. Water Bureau, 650 Main St., Hartford, Sept 3, steel standpipe, 70 ft. high, 27½ ft. diam. foundation and pipe pit, Mountain Rd., from S. Griffin Wise Co., 26 E. First St., Mt. Vernon, New York. **$31,423.** CD 8/12—ENR 8/22.

Conn., Southbury—State, Comptroller, State Capitol, Hartford, Aug. 30, addnl. water supply, from A. Bartone, 204 South St., Hartford. **$39,633.** CD 8/22.

Ga., Valdosta—City, c/o Mayor, Aug. 28, water supply imprvs., from Stevens Southern Co., 2555 W. Beaver St., Jacksonville 4, Fla. **$62,345.** CD 8/2—ENR 8/8.

N. J., Trenton—Mercer Co., Court House, rejected bids Aug. 28, reservoir, L.B. **$74,675**; equip. and piping, L.B. **$45,463.** CD 8/29—ENR 9/5, under LB.

★**Tex., Dallas**—City, E. Goforth, secy., City Hall, Aug. 28, addns., imprvs. to Bachman water purification plant Sect. 2, Clear Water Basin 2 and exten. filter house, from Nogaard & Shaw, 2933 Henderson St. **$562,110.** CD 8/13.

Tex., San Antonio—Bexar Metropolitan Water Dist., R. J. Harding, 417 W. Summit St., project abandoned, c.i. water distr. mains, **$75,000**; 1 and 2 in. c.i. water lines radiating from mains, **$25,000.** CD 5/23—ENR 6/13.

Tex., Liberty—City, City Hall, rejected bids July 8, general imprvs., exten. water sys. L.B. **$77,291.** Will readvertise. CD 7/15—ENR 7/18, under LB.

CONTRACTS AWARDED

Fla., Lake Worth—City, c/o Water Supt., drilling 6 water wells, to Gray Well & Pump Corp., 854 Garfield St., Jacksonville. **$24,510.** CD 2/7/45—ENR 2/22/45.

Ga., Columbus—Bd. Water Comrs., c/o W. J. Wood, Columbus, filtration plant, to Hardaway Contr. Co., 15 11 St. **$255,000.** CD 8/2—ENR 8/8.

Ga., Monticello—City, J. E. Hecht, mayor, WW imprvs., 500,000 gal. filtration plant, 200,000 gal. clear well, to C. Y. Thomason Co., Greenwood, S. C. **$94,683.** Bids 8/27. CD 8/2—ENR 8/8.

Ia., Fairfield—City, H. L. Easton, clk., WW imprvs., 500,000 gal. steel tank on tower, to Pittsburgh-Des Moines Steel Co., 1015 Tuttle St., Des Moines. **$44,500.** CD 8/7—ENR 8/15.

N. C., Franklin — Town, street imprvs., watermains and sewer extens., to Asheville Paving Co., Asheville. **$105,568.** Bids 8/22 CD 8/9—ENR 8/15.

Ore., Maplewood—Maplewood Water Dist., 6810 S.W. 52 Ave., Portland, 2 covered concrete reservoirs, to E. E. Settergren, Henry Bldg., Portland. **$47,157.** Est. $52,000. Bids 8/28. CD 8/20—ENR 8/29.

S. C., Eau Claire—Town, WW imprvs., filter plant and watermains, to Kahn & Jackson, 714 Lady St., Columbia, **$42,170** and **$66,686** respectively; tank on tower, to Chicago Bridge & Iron Co., Healey Bldg., Atlanta, Ga., **$28,700.** CD 8/9—ENR 8/15.

Tex., Bishop—City, City Hall, drilling, casing, developing water supply well, to R. L. Fordtran, Bishop, approx. **$26,000.**

Tex., Dallas—City, City Hall, 40,000 lin. ft. 16 in. enameled pipe, to United States Pipe & Foundry Co., Praetorian Bldg. **$160,000**; 270,000 lin. ft. c.i. water pipe, to National Cast Iron Pipe Co., 2009 Main St. **$339,045.**

Tex., San Antonio—City Water Bd., 106 W. Market St., c.i. watermain line to Alamo Airport, force account. **$25,000.** CD 4/11.

Tex., San Antonio—W. K. Ewing, c/o F. H. Wolff, Alamo National Bldg., c.i. water lines and imprvs., Terrell Heights Pl., Purchase & Hire. **$34,000.** CD 12/5—ENR 1/3.

Tex., Sherman—City, J. Hardy, mgr., City Hall, c.i. water force main line, to Austin Bridge Co., P. O. Box 1590, Dallas, approx. **$25,000.** CD 3/25—ENR 4/4.

Wash., Wapato—Town, Town Hall, 29,560 ft., 6- to 12-in. c.i. pipe and fittings for water sys., to Pacific States C. I. Pipe Co., Provo, Utah, **$23,316**; and to G. H. Purcell Co., Coman Bldg., Seattle, **$23,327.** Bids 8/12. CD 7/31.

Que., Ancienne Lorette—Town, P. Hamel, secy., 4 m.g. reservoir, to Union des Carriers et Pavages, Ltd., 48 2 Ave., Quebec City, about **$37,000.**

Que., Plessisville—Town, J. C. Samson, secy., water and sewer extens., to Union des Carriers et Pavages, Ltd., 48 2 Ave., Quebec City. **$34,000.** Est. about $75,000. C. Lessard, 32 Blvd., des Allies, Quebec City, engr.

PROJECTS COVERED

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger: water supply, earthwork, waterworks $22,500; other public works $40,000; industrial buildings $55,000; other buildings $205,000.

Classes of Construction

(Name in order of Listing)

Water Supply
Sewers, Waste Disposal
Bridges
Streets & Roads
Earthwork, Waterways
Latin America
Public Buildings
Commercial Buildings
Industrial Buildings
Unclassified

Stages Reported

PROPOSED WORK: Including appointment of engineers or architects.
BIDS ASKED (new announcements only). For full calendar, see also preceding issues of ENR.;
LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.
CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

Symbols and Abbreviations Include:

♀ Federal Government
★ Project of $500,000 or over
ENR Engineering News-Record
CD Engineering News-Record Construction Daily

SEWERS, WASTE DISPOSAL

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked September 16

Mass., Taunton—Geilich Tanning Co., W. Water St., industrial waste treatment plant, incl. concrete tank, piping, etc. W. Water St. $40,000. Thomas R. Camp, 6 Beacon St., Boston, engr.

Mass., Worcester—City, City Hall, storm and sanitary sewers in Saxon, Westerbrook and Kennicutt Rds. Over $40,000. Bureau Eng., City Hall, engr. CD 8/8—ENR 8/22.

Pa., Phila.—City Dpt. P. Wks., City Hall Annex, sewers for new residential developments, Sched. A, over $75,000; sewers, various locations, Sched. B, over $75,000; sewage disposal facilities, Sched. C, over $100,000; southwest main gravity over intercepting sewer, Sched. D, $150,000. T. Buckley, ch. engr.

Ont., Bowmanville—Town, A. J. Lyle, clk., approx. 5,500 lin. ft. sanitary sewers, also manholes, etc. About $50,000. Proctor, Redfern & Laughlin, 36 Toronto St., Toronto, engr.

Bids Asked September 18

Mo., Slater—City, L. A. Brown, clk., sewer extens. $105,000 sewer disposal plant with auxiliaries, appurtenances, piping, etc. $87,000. E. T. Archer & Co., 114 W 10 St., Kansas City, engr. CD 5/22—ENR 6/13.

Bids Asked September 23

Calif., Stockton—City, City Hall, pumping plant for sanitary sewer, Sharp's Lane. Plans deposit $5. L. Payton, city engr.

Conn., Winsted—City, 27 Elm St., sanitary sewer and appurtenances in Lake and E. Lake Sts. Buck & Buck, 650 Main St., Hartford, engr. CD 8/22/45—ENR 9/6/45.

Bids Asked September 24

N. J., Hamilton Twp. — Hamilton Twp. Comm., Municipal Bldg., 2090 Greenwood Ave., sanitary sewage collection sys., exten., addns., to Lilly St., Wilfred, Parkinson, Oregon, Miles and Dewey Aves. incl. 6,320 lin. ft. terra cotta pipe, 50 lin. ft. risers, 20 manholes. Plans deposit $25. Wm. E. Riley, Municipal Bldg., engr. CD 11/15—ENR 11/29.

Wash., Pullman—City, 2 stage, bio-filtration type sewage treatment plant. $150,000. Plans deposit $35. Stevens & Koon, Spalding Bldg., Portland, Ore., engrs. CD 9/20—ENR 9/27.

Bids Asked in Late September

Tex., Omaha—City, City Hall, sewage treatment plant. $40,000. Freese & Nichols, 407 Danciger Bldg., Fort Worth, engrs. CD 10/31—ENR 11/29.

Bids Asked October 2

Calif., Tracy—City, City Hall, vitr. clay sanitary intercepting and lateral sewers, appurtenances. Plans deposit $25. J. S. Bates, 3134 Eton Ave., Berkeley, engr. CD 8/13/45—ENR 8/23/45.

LOW BIDDERS

Ark., Corning—City rejected bids Aug. 22, sewerage sys. CD 8/15.

Ark., Crawfordsville—City received no bids Aug. 24, sewerage sys. Dickinson & White, 115 N. Spring St., Little Rock, engrs. CD 8/15.

Calif., Hayward—Oro Loma Sanitary Dist., 21845 Foothill Blvd., Sept. 3, sanitary sewer lines, El Portal Annex, from Oakland Sewer Constr. Co., 9915 Walnut St., Oakland. **$87,000.** CD 8/26.

Calif., San Leandro—City, City Hall, Sept. 3, sewage pump. station, from Central Calif. Constr. Co., Inc., 116 Erie St., San Francisco. **$82,219.** CD 8/26.

Ill., Chicago—Sanitary Dist. of Chicago, 910 S. Michigan Ave., Aug. 29, West-Southwest Sewage Treatment Works, Div. NN, from Thomas McQueen Co., 1313 Circle Ave., Forest Park. **$171,450.** CD 8/23.

Ill., Fairfield—City, E. P. Fleming, clk., City Hall, rejected bids Aug. 20, sewerage sys. and WW imprvs. **$400,000.** CD 7/24—ENR 8/1.

SEWERS, WASTE DISPOSAL (Low Bidders. Cont'd.)

Mass., Newton—City, City Hall. Sept. 4. sanitary sewers in various streets, from A Piatelli & Co., 1259 Hyde Park Ave., Hyde Park. **$55,305.** CD 8/26—ENR 8/29.

Ore., Sandy—City, City Hall, rejected bids Aug. 26, sewer lines and disposal plant. L.B. **$47,495** and **$44,980** respectively. CD 8/13.

Tex., Arlington—City, W. F. Altman, mayor, City Hall, Aug. 27, variable sizes sanitary sewer lines, from F. S. Oldt Co., 402 S. Haskell St., Dallas, approx. **$40 000.** Myers & Noyes, 2204 Tower Petroleum Bldg., Dallas, engrs. CD 8/20—ENR 8/22.

★**Tex., Houston**—City, c/o M. H. Westerman, secy., City Hall, Aug. 26, Country Club Bayou storm sewer, from Holland Constr. Co., Route 3, Box 19. **$862,445.** CD 8/16.

Tex., Liberty—City, City Hall, rejected bids, imprv. sewage disposal plant, lines and general sys. imprvs. C. A. **$124,459.** CD 7/15—ENR 7/18 under CA.

Tex., Lorenza—City, City Hall, sewage disposal plant, from Panhandle Constr. Co., Lubbock, approx. **$40,000.** CD 8/9—ENR 8/15.

Tex., San Antonio—Ed. Harris & E. W. Hartman, 5139 S. 36 W. Ave., project abandoned, wet garbage sewage processing plant. **$60,000.** CD 10/26—ENR 11/8.

Tex., Victoria—City, B. T. Jordan, mayor, City Hall, Aug. 26, incinerator plant, from Cunningham Constr. Co., P. O. Box 155, Grayson St. Station, San Antonio, **$80,000.** Est. $45,000. CD 8/8—ENR 8/15.

★**†Virgin Islands**—R. B. Newman, Jr., deputy comr. for Construction, Bureau of Community Facilities, F. W. A., Federal Works Bldg., Wash., 25, D. C., Aug. 27, sanitation and fire protection facilities and intercepting sewer at Charlotte Amalie, St. Thomas. Projs. 2 and 3, and sanitation and fire protection facilities at Christiansted and Frederiksted, St. Croix, Proj. 19, from L. L. Mears & Chas. M. Ewing, 2196 N. W. 17 Ave., Miami, Fla., Sect. 1, approx. **$430,075;** Sect. 2, approx. **$289,870;** Sect. 3, approx. **$170,004;** Sect. 4, approx. **$206,293;** Sect. 5, approx. **$97,531.** CD 7/10—ENR 7/18.

Wash., Soap Lake—Town, Town Hall, Aug. 28, sewage treatment plant, 2 lift stations and mains, water sys. and reservoir, from Morrison-Knudsen Co., Inc., 319 Bway., Boise, Idaho, **$235,538.** Est. $225,000. CD 8/14.

CONTRACTS AWARDED

Calif., Lomita Park (P. O. San Mateo)—Lomita Park & Capulchino Sanitary Dist., Firehouse, sanitary sewerage pump. plant, force main, pumping unit in Millbrae outfall sewer pump. plant, sanitary sewer interceptor, Bay St., to Freethy-Fogelberg Co., 1436 Kearney St., El Cerrito. **$41,803.** CD 8/27—ENR **8/29.**

Ind., Anderson—City, Pittsford Valley Creek sewers, Sects. 1 and 2, to Anglemeyer Constr. Co., Anderson. **$39,760** and **$48,700** respectively. CD 8/19.

Wash., Ephrata—City, City Hall, storm sewers, to Painter, Pfeiffer, Honner & Hargraves, E. 6203 Sharpe St., Spokane, **$73,254.** Awarded 8/30. Parker & Hill, Smith Tower, 2 Ave. and Yesler Way, Seattle, Zone 5, engrs. CD 8/27—ENR 8/29, under Roads.

Wis., Green Bay—City, City Hall, 2 story, 53x77 ft., rein.-con., steel, brick incinerator bldg., to H. Bishop, 1120 McCormick St., **$115,674;** furnaces and stack, to Pittsburgh-Des Moines Steel Co., 38 S. Dearborn St., Chicago, Ill. **$79,650.** Bids 8/2. CD 7/26.

Wis., Watertown—City, City Hall, installing 14,000 ft., 8 in and 2,500 ft. 12 in. vitr. clay sanitary sewers, to Stone Constr. Co., 4516 N. Morris Blvd., Milwaukee, Zone 11, **$54,982.** Bids 8/31, awarded 9/3. R. J. Podolske, city engr.

Ont., Chippawa—Municipality, sewers, to C. Lorenzo, 4 Rue Principale, Chippawa. Est. $45,000.

BRIDGES

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked September 17

South Carolina—State Hy. Dpt., J. S. Williamson, dir., Columbia. 150 ft. rein.-con. bridge over Sammy Swamp near Manning, FAS S-127 (1), Clarendon Co., Plans deposit $2; 4 rein.-con. bridges, 1,980 ft. over Little Pee Dee River and Swamp, near Mullins, FAS S-136(2), Horry and Marion Counties. Plans deposit $3.

Bids Asked September 18

New York—H. A. Cohen, dir. Bureau Contrs. & Accounts, The Governor Alfred E. Smith State Office Bldg., Albany, Zone 2, 4 span I-Beam bridge 0.07 mi. Steuben Co. $155,000. Plans deposit $5; adv. ENR 9/12.

Bids Asked September 19

Virginia — State Dpt. Hys., Richmond, 1,385 ft., concrete sidewalks, on bridge over Staunton River at Altavista Route 29, S.P. S-259-SW2-B4R, B5R, SW 3, Campbell and Pittsylvania Counties. Plans deposit $5.

Bids Asked September 20

Kentucky—Dpt. Highways, Frankfort, repairing flood damage on 0.129 mi. bridge and approaches at Ages, WER2 (1), SP48-48, 0.093 mi. bridge and approaches at Closplint, Harlan-Closplint Rd., WER 2(2), SP 48-48; 0.035 mi. bridge and approaches Harlan-Whitesburg Rd., WER 2(3), SP48-8, 0.068 mi. bridge and approaches at Grays Knob, WER2(4), SP 18-88, all foregoing Harlan Co.

Bids Asked September 24

New Jersey—S. Miller, Jr., comn., State Hy. Dpt., Trenton, underpass at Union Ave. and underpass at Riverview Ave., Route 6, Sect. 22 A, in Totowa Twp., Fed. Aid. Proj. FI-88 (11), Passaic Co., adv. ENR 9/12.

Bids Asked September 26

Florida — State Rd. Dpt., Tallahassee, 465 ft. bridge over Wrights Creek, 15 ft. concrete slab spans, Rd. 71, Job 5200-101, Holmes Co.; 135 ft. bridge over Alligator Creek, 75 ft. bridge over relief opening for Alligator Creek, 15 ft. concrete slab spans, Rd. 2, Job 6100-102; 195 ft. bridge over Alligator Creek, 15 ft. concrete slab spans, Rd. 91, Job 6100-103; 480 ft. bridge over Holmes Creek, 105 ft. bridge over Open Creek, 15 ft. concrete slabs, Rd. 36, Job 6100-104, all foregoing Washington Co. $75,000.

Bids Asked October 2

California—State Div. Hys., Sacramento, rein.-con. slab bridge across Laguna Creek about 0.8 mi. north of Elk Grove, Sacramento Co.; substructure for bridge across Stanislaus River about 8 mi. northwest of Modesto, Stanislaus and San Joaquin Counties; steel girder bridge and about 0.4 mi. grading and plant mix surfacing at Calaveras River about 8 mi. north of Stockton, San Joaquin Co.; rein.-con. bridge across Poso Creek overflow and about 6.7 mi. grading, concrete paving and placing plant mix surfacing on shoulders between Cawelo and Famoso Underpass, Kern Co. G. T. McCoy, Sacramento, hy. engr.

Bids Asked October 3

California—State Div. Hys., 808 State Bldg., Los Angeles, 2 structural steel, concrete bridges, Route 26 at 9 and 15.5 mi. northwest of Westmoreland, Imperial Co. G. T. McCoy, 808 State Bldg., Los Angeles, engr.

California—State Div. Hys., Sacramento 2 culverts near Irvine about 6 mi. south of Tustin, Orange Co. G. T. McCoy, Sacramento, state hy. engr.

LOW BIDDERS

Arkansas—State Hy. Dpt., Little Rock, received no bids Aug. 29, approaches and bridge superstructure on Beaver-Eureka Springs Rd., and rein.-con. bridge on Garfield-Eureka Springs Rd., both Carroll Co.; 380 ft. bridge Higden-Stark Rd., Cleburne Co.

California — State Div. Hys., Sacramento, Sept. 4, steel girder bridge, grading approaches, etc. Placer and El Dorado Counties, from H. W. Ruby, Northrup Ave., Sacramento. **$349,627.** CD 8/9—ENR 8/15.

California — State Div. Hys., Sacramento, rejected bids July 5, undercrossing Santa Ana Parkway, Soto St., Los Angeles Co., L.B. **$151,456.** CD 6/6—ENR 6/13.

Florida—State Hys. Dpt., Tallahassee, Aug. 29, bridge, Madison Co., from Wainer Constr. Co., Valdosta. **$41,921.** CD 8/12—ENR 8/22, under Streets and Roads.

Illinois—State Div. Hys., Springfield, received no bids Aug. 27, continuous steel I-Beam bridge over Spring Creek, Macon Co.; 3 rein.-con. concrete slab bridges, Franklin Co. CD 8/20—ENR 8/22.

Kan., Wellington — Sumner Co., Wellington rejected bids Aug. 21, State Creek Bridge Proj. S 71 (1), Sumner Co. CD 8/8—ENR 8/15.

★**Maryland**—State Rds. Comn., Baltimore, Aug. 27, Georgia Ave. underpass, in Silver Spring, Montgomery Co., from J. D. Hedin Constr. Co., Anascostia Rd. and Foote St., NE., Wash., D. C. **$693,362.** CD 8/6—ENR 8/15.

Minn., Austin—Mower Co., C. M. Hubbard, aud., received no bids Aug. 23. Bridge 6645, three 36-ft. I-beam spans, 24 ft. roadway, 3.6 mi. northwest of LeRoy, S. P. 50-508-03 (SAR 8), Minn. Proj. S. 297 (1). Over $40,000. CD 8/7—ENR 8/15.

Missouri—State Hy. Comn., Jefferson City, rejected bids Aug. 2, I-Beam spans, Proj. S-244 (1), Proj. S-244 (1), both Nodaway Co.; Proj. S-174-B (1), Adair Co.; Proj. S-858 (5), Sect. A, Schuyler Co.; Proj. S-833 (5), Proj. S-833 (5), both Henry Co.; Proj. S-124 (2), Osage Co.; rein.-con. deck girder spans, Proj. FAS 171 (1), Iron Co.; Proj. S-728 (2), Madison Co.; rein.-con. slab spans, Proj. S-404 (4), Sect. A, Cedar Co.; Proj. S-728 (2), Sect. B, Madison Co.; Proj. S-190 (1), Cedar Co.; Proj. S-230-B (1), Lincoln Co.; Proj. S-329 (1); concrete frame, Proj. F-864 (2), St. Louis Co.; steel truss span, Proj. S-404 (4), Sect. B, Vernon Co.; widening rein.-con. slab span, Warren Co. CD 7/24.

★**New York**—H. A. Cohen, dir. Bureau Contr. & Accounts, Albany, Sept. 4, bridge 0.45 mi. Nassau Co., from Senior & Palmer, Inc., 50 Church St., New York. **$545,990.** Est. $575,000. Received no bids bridge 0.4 mi. Columbia Co. CD 8/20—ENR 8/22.

Oklahoma—State Hy. Dpt., Oklahoma City, rejected bids Aug. 27, repairing Little Deer Creek bridge on U. S. 66 at Weatherford, Custer Co. L. B. **$37,194;** bridge on State Hy. 99, south of Kansas State Line, Osage Co. L. B. **$94,807.** CD 8/13.

Oklahoma—State Hy. Dpt., Oklahoma City, received no bids Aug. 27, concrete bridge, Marshall Co., **$32,358;** concrete bridge, State Hy. 7, Murray Co., **$90,000.** CD 8/13.

CONTRACTS AWARDED

★**Fla., Miami**—Comrs. Dade Co., paving Rickenbacker Causeway between the Mainland and Virginia and Biscayne Keys, to W. J. Price Dredging Corp., 3200 S.W. 27 St., Zone 33. **$616,570.** Awarded 9/3. 11/9/44—ENR 11/30/44, under Streets & Roads.

Kansas—State Hy. Dpt., Leavenworth, to Otto W. Knutson, 3527 Bway., Kansas City, Mo., Bridge 10.5 **$58,322,** Bridge 14.3, $49,392; and Bridge 24, **$87,205,** all Leavenworth Co. Grand total **$194,919.** Bids 8/16, awarded 8/28. CD 8/7.

Kansas—State Hy. Dpt., Olathe, to J. A. Tobin Constr. Co., 3700 Rainbow Blvd., Kansas City, Kan. Bridge, 31.7, FA 315 J, **$45,024;** Bridge 33.4, FA 315 J (3), **$76,747;** Bridge, 33.5, FA 315 J (3), **$67,056,** all Johnson Co. Grand total $188,827. Bids 8/23, awarded 8/28. CD 8/14.

Louisiana—State Dpt. Hys., Baton Rouge, reconstructing superstructures of creosoted timber trestle span bridges 0.356 mi North Pass and Owl Bayou Bridges, Tangipahoa Parish to Newson Bros., Columbia. **$101,718.** Bids 7/24, awarded 8/6 CD 7/31—ENR 8/8, under LB.

Oklahoma — State Hy. Dpt., Oklahoma City, substructure concrete bridge, Okfuskee Co., to J. S. Thompson, 1705 N.W. 38 St., Oklahoma City. **$100,746.** Est. $97,853. Bids 8/13, awarded 9/3. CD 7/25—ENR 8/1.

Oklahoma — State Hy. Dpt., Oklahoma City, concrete bridge on State Hy. 18, near Kemp, Carter Co., to Ottinger Bros., 3901 N. May St., Oklahoma City. **$44,844.** Est. $36,500. Bids 8/27, awarded 9/3. CD 8/13.

Oklahoma—State Hy. Dpt., Oklahoma City, concrete bridge on U. S. 70 east of Bennington, Bryan Co., to S. E. Logan & Sons, Muskogee, **$44,115.** Est. $51,000. CD 8/13.

Tex., Beeville—Bee Co., J. C. Beasley, judge, Beeville, bridge work, to Austin Bridge Co., P. O. Box 1590, Dallas. **$171,211.** Est **$175,000.** Bids 8/27. CD 8/13.

Wyoming—State Hy. Comn., J. R. Bromley, supt., Cheyenne, 11 rein.-con. culverts, 20 ft. rein.-con. arch culvert and substructure on two I-beam bridges, Unit 1, on 12.081 mi. Cheyenne-Wheatland Rd., Laramie Co., to Roush Constr. Co., Alliance, Neb., **$99,230.** Bids 8/27.

STREETS AND ROADS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked September 17

South Carolina—State Hy. Dpt., J. S. Williamson, dir., Columbia, grading, bituminous surfacing 8.871 mi. from west to intersection Rte. 28 at Antreville, SC 1238, Abbeville Co.; 14.449 mi. from Little Pee Dee River to Rte. 701, FAS S-136(2), Horry Co.; 3.21 mi. from State TB Sanitorium to Killian, FAS S-202 (1), Richland Co.; 1.377 mi. from Rte. 321 by way of Cannon Mill to Rte. 49, SC 46252, York Co.; bituminous surfacing 6.991 mi. from Boykin to intersection Rte. 9, FAS S-143 (1), Marlboro Co.

Bids Asked September 18

Kansas—State Hy. Dpt., Eldorado, grading, light type surfacing, subgrade reconditioning 7.176 mi. Proj. S 271(1), Butler Co.; light type surfacing, subgrade reconditioning 9.542 mi., grading 9.536 mi., and Bridge Sta. 231 plus 37, three 10x6x28 ft., Proj. S 305-1, Cowley Co.

Louisiana—State Dpt. Hys., Baton Rouge, sand clay gravel base course, bituminous surfacing 3.998 mi. Rte. 490, Blackburn-Homer Hys., SP 85-07-04, Claiborne Parish; 8.84 mi. Rte. 33, Manchac-Ponchatoula Hy., SP 17-02-13, Tangipahoa Parish.

★**New York**—H. A. Cohen, dir. Bureau Contrs. & Accounts, The Governor Alfred E. Smith State Office Bldg., Albany, Zone 1, grading, structures 0.28 mi. Bronx Co., $828,000; 1.35 mi. Nassau and Suffolk Counties, $790,000; 3.63 mi. Ulster Co., $785,000, plans deposit $20 each; traffic divider and imprv. access roads 6.67 mi. Nassau Co., $482,000, plans deposit $10; concrete paving 1.74 mi. Jefferson Co., $320,000, plans deposit $10; 3.76 mi. Erie Co., $762,000; 0.18 mi. Jefferson Co., $297,000, plans deposit $5 each; 9.26 mi. Greene Co., $1,208,000, plans deposit $20; sanitary sewers and appurtenances, Queens Co., $25,000, plans deposit $5; adv. ENR 9/12.

STREET AND ROADS (Bids Asked, Cont'd.)

Bids Asked September 19

Florida—State Rd. Dpt., Tallahassee, grading, draining 11.8 mi. Rd. 162, between Okeechobee Co. line and point east, FASP S-19(2), St. Lucie Co.

Florida—State Rd. Dpt., Tallahassee, grading, draining 8.01 mi. 6 timber and concrete bridges, Rd. 162-A, between Rd. 29 and St. Lucie Co. Line, FASP S-19(1), Job 9110-201, Okeechobee Co. $250,000.

Virginia—State Dpt. Hys., Richmond, macadam surface treatment 3.57 mi. Route 21, S. P. S-406-A-2S, Bland Co.; 7.94 mi. Route 42, S. P. 1070-F, Fed. Proj. S-446-(4), Giles Co.; 6.83 mi. Route 269, Proj. S-1412-C,D, Highland Co. Plans deposit $5 each; conditioning bituminous surface treatment 5.2 mi. Route 234, S. P. S-1250-CS1, Prince William Co.

Bids Asked September 20

Calif., Westwood—University of California, 405 Hilgard Ave., Los Angeles, imprv. Arroyo area, campus of U.C.L.A., Westwood, clearing and grubbing, 350,000 cu. yd. excavation and grading, 50,000 cu. yd. top soil in place. $300,000. Plans deposit $100. Office of Comptroller, Administration Bldg., 405 Hilgard Ave., Los Angeles, engr. CD 4/5—ENR 4/18.

Kentucky—Dpt. Hys., Frankfort, grading, draining, traffic bound surfacing 5.151 mi. Hardinsburg-Fordsville Rd., Hancock and Ohio Counties; bituminous surfacing 5.043 mi. Munfordville-Clarkson Rd., Hart Co.; grading, bituminous surfacing 7.847 mi. Benton-Eggner's Ferry Rd., Marshall Co.; grading, drainage, bridging 0.746 mi. Maysville-Brooksville Rd., Mason Co.; flood damage repairing 4.622 mi. Stone-McVeigh, left fork Blackberry Creek and Beaver Creek Rds., Pike Co.; imprv. 1.17 mi. Pineville-Middlesboro-Cumberland Gap Rd. from 10 and Cumberland Sts. in Middlesboro to southeast city limit, MP 7-124-Q, 0.83 mi. Pineville-Middlesboro-Cumberland Gap Rd., from southeast city limit of Middlesboro to Virginia state line, MP 7-124-L, both Bell Co.; MP Group 22 (1946), Middle Fork- Fred Bird Rd. from junction of Ky. 257 at Stinnett and exten. west 0.6 mi., RH 1013-Sect. A; Hyden-Thousandsticks Rd. beginning approx. 1.5 mi. northeast of Ky. 80 approx. 1 mi. southeast of Hyden and exten. westwardly 1 mi., RH 1014-Sect. B; 2 mi. Wolf Creek Rd. from junction of RH 1001, 3 mi. south of Wooten and exten. south of Raccoon Creek, RH 1018-Sect. B; Wendover Rd. from Ky. 80, 3 mi. southeast of Hyden and exten. southwest 1 mi., RH 1023-Sect. B, Leslie Co.; RH Group 29 (1946); bituminous surfacing and waterbound macadam base approx. 9,000 sq. yd. Blue Grass Airport Rd., SP 32-204, Fayette Co.

Vermont—State Hy. Dpt., Montpelier, grading, subbase of gravel, drainage, crushed gravel mixed-in-place surface course with refined tar and widening 2 concrete T-Beam bridges. Over $100,000. Plans deposit $10.

Bids Asked September 23

Ark., Nashville—Nashville Curb & Gutter Dist. 4, curb and gutters in Curb & Gutter Dist. 1; paving certain streets in Dist 4. Plans deposit $10 each. Wilson Eng. Co., 102½ E. 3 St., Texarkana, engr.

Bids Asked September 24

†**Montana**—Pub. Rds. Admin., 342 P. O. Bldg., Missoula, grading 9.4 mi. Lewis & Clark Hy., Lolo National Forest, Missoula Co. CD 2/5—ENR 2/21.

New Jersey—S. Miller, Jr., comr. State Hy. Dpt., Trenton, constructing 1.741 mi. Route 45, Sect. 22, and Route 44, Sect. 9A, Westville to Verga, Fed. Aid Proj. F-122 (6), Gloucester Co.; adv. ENR 9/12.

Wisconsin—State Hy. Comn., Madison, grading, draining 0.914 mi. Madison-Baraboo Rd., Mendota-Westport Rd., Fed. Aid Grade Crossing Proj. FAGS 219.0(3), State Trunk Hy. 113, Deane Co.; 7.004 mi. Clintonville-Antigo Rd., Marion-Split Rock Rd., F. A. P. F-51.1 (5), U. S. Hy. 45, Shawano Co.; grade, drain and substructure B-735 4.87 mi. Spooner-Superior Rd., Minong-Gordon Rd., F. A. P. F-8.5 (30), U. S. Hy. 53, Douglas Co.; gravel, traffic bound surface (base) course, sand-gravel fill 2.001 mi. Maple-S. T. H. 13, Fed. Aid. Secondary Proj. S-274.0 (1), County Trunk Hy. F, Douglas Co.; 3.49 mi. Solon Springs-Superior Rd., Fed. Aid Secondary Proj. S-276.0 (1), County Trunk Hy. A, Douglas Co.; 2 mi. Minnesota State Line-Dewey-S.T.H. 35 Road, Fed. Aid Secondary Proj. S-277.0 (2), County Trunk Hy. C, Douglas Co.; 9.215 mi. Pattison State Park-Lake Nebagamon Rd., Fed Aid Secondary Proj. S-791.0 (1), County Trunk Hy. B., Douglas Co.

Bids Asked September 25

B. C., Esquimalt—Dpt. P. Wks., Ottawa, Ont., maintenance repairs to roadway and yard at Esquimalt Dry Dock. About $45,000. Plans deposit $10. R. Blais, c/o owner, engr.

Bids Asked September 26

Florida—State Rd. Dpt., Tallahassee, bituminous retread surfacing 10.846 mi. Rd. 4 between Lake Park and Jupiter, SP Job 9304-107, Palm Beach Co., $175,000; 4.14 mi. Rd. 140, through U. S. Naval Reservation between Mile Posts 26.87 and 31.01 just south of Cocoa Beach, SP 7006-107, Brevard Co., $30,000; 17.769 mi. Rd. 82 between Trenton extending north near Santa Fe River, SP Job 3105-102, Gilchrist Co., $225,000; clearing, grubbing, grading, bituminous surfacing 4.084 mi., 15 ft. slab span bridge over Stafford Creek, Rd. 159, between Blountstown extending north SP Job 4703-101, Calhoun Co., $120,000; bituminous seal coating 4.184 mi. Rd. 3, between Rd. 553 and Clay Co. Line, SP Job 7203-902, Duval Co., $10,000. F. E. Coloney, hy engr.

Bids Asked September 27

Pennsylvania—State Dpt. Hys., Harrisburg, crushed aggregate base with bituminous surfacing and 1 steel I-Beam bridge, 985 ft. Route L.R. 01008 (1), Latimore Twp., Adams Co.; widening pavement with plain concrete base and crushed aggregate and bituminous surfacing new base and existing pavement 31,560 ft. L.R. 78 (R-2), T.R. 68, Connoquenessing Boro, Connoquenessing and Butler Twps., Butler Co.; rein.-con. paving 8,031 ft. L.R. 11011 (3 and 4) L.R. 525 (4), T.R. 271 and U.S. 219, L.R. 52 (20), T.R. 53, in Johnstown, Cambria Co.; rein.-con. paving, incl. 1 rein.-con. structure, crushed aggregate base with bituminous surfacing, miscellaneous drainage, repairing bridge 6,306 ft. L.R. 61 (R-1), T.R. 59, (R-2), T.R. 28 and 219, Brockway Boro, Jefferson Co.; rein.-con. wearing surfacing 1,349 ft., L.R. 11 (12), Kingston Boro, Wilkes-Barre City, Luzerne Co.; bituminous resurfacing new flexible and rigid base replacements, widening portion pavement with rein.-con., reconstructing portion pavement with rein.-con. and patching portion pavement with rein.-con. 39,041 ft., L.R. 159 (8), T.R. U.S. 22, Bethlehem and Palmer Twps., city of Bethlehem, Wilson Boro, Northampton Co.; native stone or crushed aggregate base with bituminous surfacing 34,984 ft., L.R. 318 (9), T.R. 267, Forest Lake and Choconut Twps., Susquehanna Co.

Bids Asked October 2

California—State Div. Hys., Sacramento, 0.8 mi. grading and plant mix on cement treated surfacing between Northwestern Pacific R.R. grade crossing and Northwestern Pacific R.R. underpass, Mendocino Co., 6.7 mi. grading, plant mix on crusher run surfacing and applying seal coat between 0.8 mi. north of Crazy Horse Summit and Chittenden Rd., Monterey and San Benito Counties. G. T. McCoy, Sacramento, hy. engr.

LOW BIDDERS

★**California**—State Div. Hys., Sacramento, Sept. 4, imprv. 5.7 mi. Solano Co., from Fredrickson Bros., 1259 65 St., Emeryville, **$512,574**; 1.7 mi. Placer Co., from Fredrickson & Watson Constr. Co., 873 81 Ave., Oakland. **$182,335.** CD 8/9—ENR 8/15.

Calif., Newport Beach—City, City Hall, Sept. 3, grading, paving, vitr. clay sewer line, Sects. 1 to 5, Balboa Island and Tract 742, etc., from Sully-Miller Contrg. Co., 1500 W. 7 St., Long Beach. **$104,818.** Est. $70,682. CD 8/23.

Florida—State Rd. Dpt., Tallahassee, Sept. 5, imprv. Jobs 1103-108, 1009-110, 1010-103 and 1020-104, Job 1023-102, Hillsborough Co., from L. J. & W. L. Cobb, Inc., 1102 22 St., Tampa, **$60,989,** Job 6006-104, Walton Co., from A. B. Covell, Defuniak Springs, **$50,533.** CD 8/19—ENR 8/22.

★**Florida**—State Hy. Dpt., Tallahassee, Aug. 29, imprv. 29.165 mi. Brevard and Volusia Counties, from R. T. Gordon & Co., 2077 W. Beaver St., Jacksonville, **$410,095*****11.3 mi. Marion Co., from L. J. & W. L. Cobb, Inc., 1102 N. 22 St., Tampa, **$59,858*****4.477 mi. Pasco Co., from R. H. Wright & Son, Ft. Lauderdale, **$244,801.** CD 8/12—ENR 8/22.

Ga., Augusta—City, c/o City Council, Aug. 20, paving streets, from W. F. Bowe & Co., Augusta. **$191,000.** CD 8/9—ENR 8/15.

Illinois—State Hy. Dpt., Springfield, rejected bids Aug. 27, imprv. 0.67 mi. Livingston Co. L.B. **$65,057.** CD 9/4. No bids received imprv. 0.51 mi. Jefferson Co. CD 8/20—ENR 8/22.

★**Illinois**—State Hy. Dpt., Springfield, Aug. 27, imprv. Jo Daviess Co., from A. C. Johnston & Son, 15 Fourth Ave., Joliet, **$11,887***** Kane and DeKalb Counties, from E. M. Melahn Constr. Co., Algonquin, **$50,884*****LaSalle Co., from J. P. Wetnerby Constr. Co., 218 W. Main St., Ottawa, **$86,603*****Effingham, Fayette, Jasper and Crawford Counties, from Mautz & Oren, Inc., 101 Henrietta St., Effingham, **$125,329*****Franklin and Perry Counties, from Chas. G. Gilmore Asphalt Products, Anna, **$403,106*****McLean Co., from Colligan Constr. Co., Kahl Bldg., Davenport, Ia., **$122,687***** Pike Co., from Illinois Steel Bridge Co., 205 Allen Ave., Jacksonville, **$78,094*****Marshall, LaSalle and Woodford Counties, from Ostrom & McGuire Constr. Co., 1401 E. Main St., Galesburg, **$56,002.** No bids received imprv. Calhoun, Jefferson, Franklin and Macon Counties. CD 8/20—ENR 8/22.

Ill., Chicago—City, Dpt. P. Wks., City Hall, Aug. 27, concrete paving N. Halsted St. from N. Clybourn to W. Fullerton Sts., from Thomas McQueen Co., 1313 Circle Ave., Forest Park. **$269,246.** CD 8/23.

Kan., Atwood—Rawlins Co., Atwood at Hoxie, rejected bids Aug. 1, imprv. 7 mi. Proj S360(2). L.B. **$11,051.** CD 7/19—ENR 7/25.

Kan., Oberlin—Decatur Co., Oberlin, at Hoxie, rejected bids Aug. 1, imprv. 6.65 mi. S292(1), 1.35 mi. S287(1), 1 mi. S289(1) and 5.886 mi. S291(1). CD 7/19—ENR 7/25.

Kentucky—State Dpt. Hys., Frankfort, Aug. 30, imprv. 6.694 mi. Hart Co. and 8.327 mi. Muhlenberg Co., from Paul A. Teegarden & Co., Columbus, Ind., **$56,457** and **$72,835** respectively; 8.245 mi. Todd Co., from E. L. Traughber, Elkton, **$48,615.** CD 8/13—ENR 8/22.

Kentucky—State Hy. Dpt., Frankfort, rejected bids Aug. 28, imprv. 5.821 mi. Lewis Co. L.B. **$89,130;** 5.043 mi. Hart Co. L.B. **$32,368;** 7.847 mi. Marshall Co. L.B. **$109,291.** CD 8/27—ENR 8/29, under L.B.

★**Louisiana**—State Dpt. Hys., Baton Rouge, Aug. 28, imprv. 10.5 mi. Plaquemine Parish, from T. L. James & Co., Inc., Ruston. **$843,213.** CD 8/12—ENR 8/22.

Louisiana—State Dpt. Hys., Baton Rouge, Aug. 28, imprv. 12.1 mi. Avoyelles Parish, from R. T. Henry, Dubach. **$58,416.** CD 8/12—ENR 8/22.

Maine—State Hy. Dpt., Augusta, Sept. 4, graveling 2.37 mi. in Anson, and 1.02 mi. in Durham, from P. E. Susi, Pittsfield, **$64,205** and **$45,552** respectively

Mass., Newton—City, City Hall, Sept. 4, reconstructing Cherry St., from P. Salvucci, 55 Pond St., Waltham, **$63,493.** CD 8/26—ENR 8/29.

Minn., Austin—Mower Co., C. M. Hubbard, auct., received no bids Aug. 23, grading 7.5 mi. between Trunk Hy. 56 and SAR 3, SP 50-508-02 (SAR 8) Minn. Proj. S 297 (1); 4.8 mi. between Browndale and Renova, SP 50-515-02 (SAR 2), Minn. Proj. S 101 (4). Over **$40,000.** CD 8/7—ENR 8/15.

Missouri—State Hy. Comn., Jefferson City, rejected bids Aug. 2, imprv. 4.464 mi. and 1.995 mi. Dunklin and Pemiscot Counties; 1.93 mi. Vernon Co.; 4.104 mi. Madison Co.; 1.363 mi. Worth Co.; 3.967 mi. Nodaway Co.; 4.271 mi. and 2.154 mi. Adair Co.; 2.689 mi. Charlton Co.; 3.749 mi. and 1.928 mi. Schuyler Co.; 4.357 mi. and 1.522 mi. Lincoln Co.; 3.335 mi. Monroe Co.; 1.643 mi. Henry Co.; 0.214 mi. and 3.388 mi. Iron Co.; 3.168 mi. Warren Co.; 2.758 mi.; 4.493 mi. and 2.126 mi. Cedar Co.; 1.717 mi. St. Louis Co.; 3.393 mi. Proj. S0332 (1) road from Pacific southeast to Brynsville. CD 7/24.

★**New York** — H. A. Cohen, dir. Bureau Contrs. & Accounts, Albany, Zone 1, Sept. 4, imprv. 1.37 mi. Ontario and Yates Counties, from Mohawk Paving Co., Inc., Geneva, **$103,164,** est. $106,000***3.56 mi. Oneida Co., from Law Brothers Co., Herkimer, **$241,619,** est. $250,000***7.04 mi. Monroe Co., from Potter-DeWitt Corp., Pavilion, **$310,927,** est. $327,000. Withdrew bids imprv. 0.28 mi. Bronx Co.; 2.89 mi. Suffolk Co., will readvertise. No bids received imprv. 6.58 mi. Livingston Co.; 0.75 mi. Essex Co.; 0.44 mi. Columbia Co.; 3.53 mi. Erie and Wyoming Counties. CD 8/20—ENR 8/22.

North Carolina—State Hy. & P. Wks. Comn., Raleigh, rejected bids Aug. 15, imprv. 5.738 mi. Union Co., L.B. **$128,688;** 3.7 mi. Rowan Co., L.B. **$41,665.** CD 8/5—ENR 8/8.

Pennsylvania—State Hy. Dpt., Harrisburg, rejected bids Aug. 16, imprv. 1,349 ft., Luzerne Co. L.B. **$39,660.** Will readvertise. CD 8/20—ENR 8/22, under L.B.

Pennsylvania—State Hy. Dpt., Harrisburg, Aug. 30, imprv. 3,338 ft., Armstrong Co., from The Ray F. Yount Co., Kittanning, **$65,748***** 6,623 ft. Crawford Co., from W. L. Dunn, Cochranton, **$68,832*****15,491 ft. Tioga Co., from Ryan Bros., Inc., Clearfield, **$258,958.** No bids received imprv. 13,180 ft. Elk Co.; imprv. 1,200 ft. Tioga Co.; 1,079 ft. Wayne Co.; 2,601 ft. Wayne Co. Will readvertise. CD 8/2—ENR 8/8.

S. C., Greenwood—Greenwood Co., G. H. Davis, chn., Aug. 29, road work, from E. H. Hines Constr. Co., Greenwood, **$103,674.** J. Hearst Coleman Co., Greenwood, engr. CD 8/26—ENR 8/29.

Tennessee—State Hy. Dpt., Nashville, rejected bids Aug. 23, imprv. S-2425(1), Blount Co., L.B. **$92,799.** Will readvertise. CD 8/30—ENR 9/5, under L.B.

Texas—State Hy. Comn., Austin, Aug. 28, imprv. 10.961 mi. Montgomery Co., from R. B. Butler, Bryan, and Howard Bros., Madisonville, **$223,688.** CD 8/20—ENR 8/22.

Tex., Dallas—City, City Hall, received no bids Aug. 31, rein.-con. paving 14 alleys.

Vermont—State Hy. Dpt., Montpelier, Aug. 30, 2.305 mi. crushed gravel mixed in place surfacing, Concord, from Lambert Const. Co., Montpelier, **$351,777;** 1.064 mi. Rupert, from Gilco, West Coxsackie, N. Y., **$45,776.** CD 8/16—ENR 8/22.

Virginia—Commonwealth of Virginia, Dpt. Hys., Richmond, Aug. 29, maintenance work, Spotsylvania Co., from J. R. Ford Co., Inc., Lynchburg, **$47,376;** surfacing, etc. 5,660 sq. yd. Norfolk and Nansemond Counties, from Williams Paving Co., 1269 E. Princess Anne Rd., Norfolk, **$39,964.** CD 8/20—ENR 8/22.

CONTRACTS AWARDED

Arkansas—State Hy. Dpt., Little Rock, bituminous surfacing 16 mi. Ashley Co., to D. F. Jones Constr. Co., 115 N. Spring St., Little Rock, **$137,895;** bituminous seal coat on 45 mi. hys. in Fordyce, to Linwood Smith, Lake Village, **$54,780.** Bids 8/29. CD 8/26—ENR 8/22.

Del., Woodcrest (Wilmington P.O.)—New Castle Co. Levy Court, Municipal Bldg., Wilmington, road paving and drainage, to Olivere Paving & Constr. Co., 100 W. 7 St., Wilmington. **$53,629.** Awarded 8/28. J. I. Cahalan, ch. engr.

STREET AND ROADS (Contracts Awarded Cont'd.)

Georgia—State Hy. Dpt., Atlanta, imprv. 7.426 mi. Ben Hill and Irwin Counties, to Caddell & Jackson, 2014 Dennis Ave., Jacksonville, Fla., **$98,551*****10.992 mi. Harris Co., and 9.09 mi. Fayette Co., to W. L. Cobb, Inc., Decatur, **$124,652** and **$235,254** respectively*** 1.587 mi. Wilkes Co., to H. P. Little, Commerce, **$93,824*****3.593 mi. Irwin Co., to Espy Paving & Constr. Co., 108 E. Bay St., Savannah, **$80,-198*****6.879 mi. Irwin Co., to C. H. Dunn Constr. Co., Moultrie, **$113,773*****8.278 mi. Warren and Jefferson Counties, to E. H. Hines Constr. Co., Greenwood, S. C., **$79,371.** Grand total $801,344. CD 8/22.

Ill., Alton—City, City Hall, bituminous concrete paving 0.07793 Proj. 35-CS and 1.5113 mi. Proj. 39-CS, to Thompson Asphalt Co., First National Bank Bldg., East St. Louis, **$50,488** and **$44,025** respectively. Bids 8/12. Sheppard, Morgan & Schwaab, Alton, engrs.

Ill., Danville—City, City Hall, asphalt paving 0.5151 mi. on 20 CS; 0.5768 on 25 CS and 0.7384 mi. on 26 CS, to McCalman Constr. Co., Danville. **$55,556.** Bids 8/17. CD 8/14.

Ill., Evanston—City, City Hall, paving 1.0559 mi. Proj. 32-CS, to Arcole-Midwest Corp., 231 N. LaSalle St., Chicago. **$45,321.** Bids 8/17. CD 8/14.

Ia., Primghar—Bd. Supervs. O'Brien Co., imprv. 18.033 mi. road, to Gus Ostermann & Sons, Ocheyedan. **$55,542.** Bids 8/27. CD 8/20—ENR 8/22.

Ia., Storm Lake—City, W. H. Kaufman, clk., 7500 sq. yd. 6 in. paving, sand-gravel aggregate; 26,200 sq. yd. 7 in. paving, curb and guttering, pavement widening, manholes, storm sewers, to Moran Constr. Co., 2123 S. 56 St., Omaha, Neb. **$151,898.** Buell & Winter, 508 Insurance Exchange Bldg., Sioux City, engrs.

Kansas—State Hy. Dpt., Olathe, imprv. 2.43 mi. and 10.699 mi. Johnson Co., to Sherwood Constr. Co., 619 N. Santa Fe St., Wichita, **$224,490** and **$39,534** respectively; 0.722 mi. Shawnee Co., to M. W. Watson, Natl. Bank of Topeka Bldg., Topeka, **$44,662.** Grand total **$308,686.** Bids 8/23, awarded 8/28. CD 8/13.

Kansas—State Hy. Dpt., Osborne, imprv. 9.505 mi. F 520(12), Osborne Co., to San-Ore Constr. Co., McPherson. **$199,503.** Bids 8/16.

Kan., Emporia—City, resurfacing streets to Kaw Paving Co., Crane and Topeka Sts., Topeka. **$68,309.** Bids 8/19. R. W. Cunningham, city engr.

Kan., Fredonia—Wilson Co., Fredonia, grading 6.29 mi. S 558 (1), to M. W. Watson Bank of Topeka, Topeka. **$44,303.** Bids 8/20, awarded 8/28. W. S. Hill, Fredonia, engr.

Kentucky — State Hy. Dpt., Frankfort, imprv. 2.774 mi. Fayette and Jessamine Counties, to W. C. Snider, Danville. **$111,564.** CD 8/27—ENR 8/29, under LB.

★**Louisiana**—State Dpt. Hys., Baton Rouge, imprv. 10.5 mi. Plaquemine Parish, to T. L. James & Co., Inc., Ruston, **$843,213.** Bids 8/28. CD 9/4—ENR 9/12, under LB.

La., Shreveport—City, paving Gilbert St. from Stephenson to Gladstone St., Wheless Ave., from Linden to Gladstone Sts. and Gilbert St. from Stephenson St. to South line Sect. 7, to O. J. Ward, Inc., 2918 Alabama Ave., **$68,957;** Gilbert St. from Ontario to Southfield Rd., E. Wichita St. from Alexandria to Cornwell Sts., and E. Wyandotte St. from Alexander to Cornwell Sts., to Flenniken Constr. Co., 3820 Florence Ave. **$69,712.** Bids 8/13, awarded 8/29.

Massachusetts — State-County-Town, 100 Nashua St., Boston, hy. constr. Waltham, to Greenough Bros., Inc., 200 Calvary St. **$42,573.** Est. $46,518. CD 8/27—ENR 8/29.

Minnesota—State Hy. Dpt., St. Paul, crushed rock surfacing for Maintenance Division; crush, screen, load, and haul about 23,200 cu. yd. crushed rock, in Rochester, to Quarve & Anderson, RFD 3, Rochester. **$45,704.** Bids 8/23. CD 8/8—ENR 8/15, under Minn., Rochester.

Minn., Fairmont—City, S. Stewart, clk., 7 in. rein.-con. paving 30,215 sq. yd. various streets, to C. H. Gould, Fairmont. **$122,573.** Bids 8/8. CD 7/31.

Minn., Jackson—C. H. Peterson, aud. Jackson Co., grading and gravel wearing course, 6.5 mi. between Jackson and Petersburg, 86,920 cu. yd. excav. and 9,697 cu. yd. stabilized gravel material in place, SP 32-503-01 (SAR 3), Minn. Proj. S 219 (1), to Reuben Minion, Bingham Lake. **$41,723.** Bids 8/23.

Minn., Rush City—City, H. L. Sherman, Clk., bituminous paving, curbs and gutters, concrete sidewalks, etc., to Alexander Constr. Co., 4641 Hiawatha Ave., Minneapolis. **$68,791.** Bids 8/26. CD 8/15.

Mo., Kansas City—City, c/o H. H. King, dir. P. Wks., City Hall, grading, drainage structures, to George Bennett Constr. Co., 1520 Central Ave. **$130,064.** CD 6/16/44—ENR 6/29/44.

North Carolina—State Hy. Dpt., W. Vance Baise, dir., Raleigh, imprv. 6.15 mi. Pitt Co., to Nello L. Teer, Durham, **$51,005;** 0.5 mi. Buncombe Co., to Asheville Paving Co., Asheville, **$102,453.** CD 8/19—ENR 8/22, under LB.

N. D., Grand Forks—City, City Hall, street paving, to Northern Constr. Co., Grand Forks, **$53,819.**

★**Oklahoma**—State Hy. Dpt., Oklahoma City, imprv. 5.6 mi. Hughes Co., to Poole Constr. Co., Shawnee, **$78,146,** est. $90,600 ***5.736 mi. and 6.012 mi. Hughes Co., to Stone & Falls, Ada, **$82,973,** est. $95,529 and **$104,364,** est. $114,733 respectively***5.4 mi. Atoka Co., and 13.5 mi. Pottawatomie Co., to S. E. Evans, Fort Smith, **$89,312,** est. $107,-500 and **$129,187,** est. $140,000***5.8 mi. Choctaw Co., to J. A. Briscoe, Stillwater, **$259,604,** est. $325,000. Grand total $743,586. Bids 8/27. CD 8/13.

Oklahoma—State Hy. Dpt., Oklahoma City, imprv. 5.6 mi. Jackson Co., to Mullinix Constr. Co., 1405 N.W. 6 St., Oklahoma City, **$44,664** est. $42,000; 3.3 mi. Logan Co., to Smith Bros., Noble, **$53,802,** est. $48,250. Bids 8/27, awarded 8/31. CD 8/13.

★**Oklahoma**—State Hy. Dpt., Oklahoma City, to Dahlgren & Brooks, Insurance Bldg., Oklahoma City, imprv. 5.6 mi. Pittsburg Co., **$233,588,** est. $242,870; 1 mi. Pottawawatomie Co., **$85,353,** est. $74,500; 7.1 mi. Jefferson Co., **$104,628,** est. $96,600***to Annis Constr. Co., 1647 Exchange St., Oklahoma City; 6.1 mi. Bryan Co., **$370,344,** est. **$56,000*****to H. D. Youngman, Baxter Springs, Kan., 6.585 mi. Choctaw Co., **$48,590,** est. $56,000***to Frazier Constr. Co., Cotton Exchange Bldg., Oklahoma City, 7.2 mi. Latimer Co., **$57,763,** est. $66,250. Grand total $900,266. Bids 8/27, awarded 9/3. CD 8/13.

Ore., Salem—City, imprv. 13 streets, to Warren Northwest, Inc., P.O. Box 5072, Portland. **$43,747.** CD 12/21/44—ENR 1/11/45.

Pa., Oil City—City, City Hall, paving dirt streets, to Baldwin Brothers Paving Co., Meadville. **$134,844.** CD 1/25/45—ENR 2/8/45.

★**Tennessee**—State Hy. Dpt., Nashville, imprv. F-46-3(4) and F-46-3, Crockett and Gibson Counties, to R. B. Tyler & Co., 1446 Levering Ave., Louisville, Ky. **$599,184.** Bids 8/23. CD 8/30—ENR 9/5, under L.B.

Tex., San Antonio—Bexar Co., Court House, widening, grading, levelling, drainage, asphalt topping, etc., Precinct 1, **$80,000;** Precinct 2, **$68,000;** Precinct 3, **$72,000;** Precinct 4, **$55,000,** own forces. Grand total $275,000. CD 6/27/45—ENR 7/12.

Wash., Ephrata—City, City Hall, 80,000 ft. curbs, to Rushlight Automatic Sprinkler Co., 55 N. E. Farragut St., Portland, Ore. **$88,000.** Bids 8/30. CD 8/27—ENR 8/29.

Wash., Shelton—Mason Co., oiling roads, to J. F. Forbes, 503 W. 4 St., Olympia. **$48,915.** CD 7/13/45—ENR 7/26/45.

Wis., Racine—City, City Hall, widening, repaving Marquette St., and paving Washington Ave., 11 and Racine Sts., to Federal Paving Corp., 3829 N. Weil St., Milwaukee. **$65,726.** Bids 8/20. Wm. J. Chadwick, city engr.

Wyoming—State Hy. Comn., Cheyenne, imprv. 3.704 mi. Teton Co. and 8.161 mi. Laramie Co., to Inland Constr. Co., 3867 Leavenworth St., Omaha, Neb., **$158,699** and **$108,468** respectively***6.288 mi. Laramie Co. and 6.36 mi. Carbon Co., to H. W. Read, 706 W. 19 St., Cheyenne, **$40,520** and**$161,545** respectively*** 10.212 mi. Natrona Co., to Forgey Constr. Co., Casper, **$239,485.** Grand total $708,717. Bids 8/27. Rejected bids 8/27 imprv. 4.706 mi. Teton Co. CD 8/26.

Manitoba—Dpt. P. Wks., Winnipeg, grading, stabilizing and bituminous surfacing 8 mi. Hy. 4 from Neepawa westward, to Commonwealth Constr. Co. Ltd., Royal Bank Bldg. **$230,127.** CD 4/11—ENR 4/18.

Ont., Moore Lake Station—Hydro Electric Power Comn. of Ontario, 620 University Ave., Toronto, grading and structures of road 13,000 ft. more or less from Canadian Pacific Ry. point to Provincial Hy. 17 near Des Joachimes Rapids on Ottawa River to Therrien Const. Co. Ltd., 200 Bay St., Toronto, about **$50,000**

Quebec—Province of Quebec, Quebec City, road constr. in St. Anne de Chicoutimi and St. Ambroise, to Provincial Constr. Co., Ltd., Shipshaw, **$60,000** and **$50,000** respectively.

Que., Havre Aubert—Municipality, asphalt paving, to Eastern Constr. Co., Ltd., New Carlisle, about **$200,000.**

EARTHWORK, WATERWAYS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked September 23

†Wyoming—Bureau Reclamation, Custom House, Denver 2, Colo., transformers, lightning arresters, switching equip. and metering equip., for Medicine Bow and Hanna substation, Kendrick Project, Spec. 1455. Extended date. CD 8/6—ENR 8/15.

Bids Asked September 25

Ont., Port Arthur—Dpt. P. Wks., Ottawa, 1,000 ft. rubble mound breakwater 300 ft. from southerly end of concrete breakwater at elevation 601.6 and continuing on line of that structure. About $200,000. Plans deposit $25. R. Blais, c/o owner, engr.

LOW BIDDERS

†California—U. S. Eng., Wright Bldg., Sacramento, Aug. 30, levee enlargement, east levee, Sacramento River from Meridian Bridge to Tisdale Weir, Sutter Co., Spec. 1247, from H. Earl Parker, 12 and F. Sts., Marysville. **$161,500.** CD 8/26.

†N. Y., Bath—U. S. Eng., Chimes Bldg., Syracuse, rejected bids May 20, flood control proj., Cohocton River, Inv. 30-180-46-12. L. B. **$423,140.** CD 5/22—ENR 5/30, under LB.

★**†N. Y., East Sidney**—U. S. Eng., Chimes Bldg., Syracuse, Zone 2, rejected bids July 2, constructing East Sidney Flood Control Proj., Ouleout Creek, Inv. 30-180-46-27. L. B. **$3,485,708,** alternate **$3,449,458.** CD 7/8—ENR 7/11, under LB.

†N. Y., Port Dickinson—U. S. Eng., Chimes Bldg., Syracuse, rejected bids Aug. 5, flood control proj., Chenango River, Inv. 30-180-47-1. L. B. **$30,000.** CD 8/12—ENR 8/22, under LB.

†Oklahoma — Bureau Reclamation, Altus, Aug. 22, earthwork and structures, Ozark Canal, Altus Proj., from Stebbins Constr. Co., 801 N. Lewis Pl., Tulsa, **$319,719.** Est. $275,000. CD 7/31—ENR 8/8.

†Texas—U. S. Eng., 606 Santa Fe Bldg., Galveston, cancelled bids to have been opened Sept. 3 dredging Gulf Intracoastal Waterway between Matagorda Bay and Aransas Bay, Calhoun and Aransas Counties, Inv. No. 41-243-47-29. CD 8/9—ENR 8/15.

†Washington—Bureau Reclamation, Customhouse, Denver, 2, Colo., July 29, 70-ton gantry crane for Grand Coulee Dam Pump. Plant, Columbia Basin Proj., from Judson Pacific-Murphy Corp., 22 and Pennsylvania Sts., San Francisco, Calif. **$127,152.** CD 7/19.

Wash., Seattle—City, County-City Bldg., 3 and James Sts., Zone 4, rejected bids Aug. 22, clearing, drainage at Lake Young storage basin, L.B. **$59,691.** CD 8/27—ENR 8/29, under LB.

Wash., Wenatchee—Wenatchee Reclamation Dist., Wenatchee, concrete canal relocation from Goodfellow Bros., Wenatchee, **$50,381.** CD 8/16/45—ENR 9/6/45.

CONTRACTS AWARDED

Calif., Los Angeles — Yacht Center Inc., 10981 Vallejo Rd. W., yacht anchorage in East Basin, Los Angeles Harbor, to Pugh Constr. Co., 1260 Alameda St., Wilmington. **$85,000.**

Fla., Jacksonville—City, dredging, cleaning Hogan Creek between Washington and 8 Sts. and dredging, cleaning, bridges, culverts over McCoys Creek along McCoys Blvd. to St. Johns River, and concrete bridge over Hogan's Creek at Washington St., to Okeechobee Constr. Co., 518 Phelps St., **$54,890** and **$44,554** respectively. Bids 7/4, awarded 8/30. CD 7/2.

Mo., St. Louis—City, M. M. Kinsey, pres. Bd. P. Serv., 304 City Hall, Zone 3, repairing recent flood damage to bed and spillway of Maline Creek under Chicago, Burlington & Quincy R.R. bridge near Chain of Rocks Water Works Plant, to F. Weber, Jr., 7929 Alamaba Ave., Zone 11. **$35,000.** G. Brown, Dpt. Streets & Sewers, 325 City Hall, Zone 3, ch. engr.

AIRPORTS & AIRBASES

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked September 16

N. Y., North Beach—TAXI-LOOP PAVING etc.—Comr. Marine & Aviation, Pier A, foot of Battery Pl., North River, New York, Zone 4, paving, grading, designated taxi-loop area east of Marine Terminal, Contr. 2490; adjustment and grading certain areas of pavement, earth, manholes and contact lights on and adjacent to Runway 22, Contr. 2500, both at LaGuardia Field.

Bids Asked September 17

Mass., East Boston—AIRPORT—Commonwealth of Mass., J. F. Cairns, comr. P. Wks. Dpt., 100 Nashua St., Boston, alterations and addns. to temporary terminal bldg., General Logan Airport, Plans deposit $10.

Bids Asked October 1

Mo., St. Louis—AIRPORT IMPRVS.—City, c/o M. M. Kinsey, pres. Bd. Pub. Service, 304 City Hall, grading, sewers, 1,285 ft. concrete pipe, at Lambert-St. Louis Municipal Airport at Robertson, St. Louis Co. Extended date. Horner & Shifrin, Shell Bldg., 1221 Locust St., engrs. CD 8/30.

CONTRACTS AWARDED

Neb., Omaha—HANGAR—United Airlines, Charles Sluder, field mgr., hangar addn., to Peter Kiewit Sons Co., Omaha National Bank. Approx **$80,000.** J. T. Allen, Brandeis Theatre Bldg., archt. CD 7/31—ENR 8/22.

Tex., Irving—STORAGE HANGARS, etc.—C. D. Wyche, 5823 Harry Hines Blvd., Dallas, storage hangars. **$80,000,** and runways up to 4,000 ft. long, taxiways, force-account. Approx **$175,000.** CD 5/9—ENR 6/16.

Newfoundland, Gander—AIRPORT IMPRVS —Dominion Govt., St. John's, imprv. Gander Bay Airport to Horwood Lumber Co., Inc., St. Johns. Est. **$100,000.** Robert P. Georee, Worcester, Mass., U. S. A., archt.

LATIN AMERICA

Venezuela, Bobures — State of Zulia, Maracaibo, bids in 90 days, cement wharfs and piers in Gibraltar and San Antonio sections of waterfront. $175,000.

Venezuela, Maracaibo — City, will widen Lago Ave. into showplace thoroughfare into residential dist., by own forces. $250,000.

Venezuela, Porlamar—Jesus Maria Patino, Porlamar, bids in November, tourist hotel. $750,000.

Venezuela, Valencia—Valencia businessmen, Sr. W. Slagter, dir., bids in 90 days hotel. $250,000. Bacalao Lara & Gomez N., Valencia, engrs.

PUBLIC BUILDINGS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked September 16

★**Pa., State College**—Harbeson Hough Livingston & Larson, archts., 117 S. 17 St., (selected list bidders) 2 dormitories, at Pennsylvania State College for State Dpt. Property & Supplies, Harrisburg. $3,000,000. Sauter & Castor, 1411 Walnut St., Phila., engrs. CD 8/28—ENR 9/5.

Ont., Hamilton—Mayor S. Laurence, chn. Bd. Control, 6 story, bsmnt., 42x125 ft., reinf.-con. brick, steel nurses residence at Mount Hamilton Hospital, for City. About $350,000. Plans deposit $25. G. E. Billson, 63 John St. S., archt.

Bids Asked September 20

†**California**—Bureau Reclamation, Denver, Colo., main control board exten. and metering panel for 230-k. Gene Interconnection at Parker Powerplant, Davis Dam Proj., Arizona-Nevada, Spec. 1470. Advanced date. CD 8/20—ENR 8/22, under Earthwork, etc.

Florida—State Dpt. Pub. Safety, Tallahassee, office bldgs. radio stations, garages for Hy. Patrol at Marietta, Duval Co., Lake City, Columbia Co., Tallahassee, Leon Co. G. Fulton, state archt.

Bids Asked September 24

Ia., Strawberry Point—City, B. R. Cole, clk., diesel generating unit, 300 kva., engine, generator, exciter. Plans deposit $25. Stanley Engrg. Co., Muscatine, engrs.

★**N. Y., New York**—New York City Housing Auth., 122 E. 42 St., Zone 17, general construction, heating and ventilating, electric work and plumbing Jacob Riis Houses and Jacob Riis City Houses. CD 9/28—ENR 10/11.

Bids Asked September 26

Ga., Ft. Valley—University Sys. of Georgia & Bd. Regents, Atlanta, 3 story girls dormitory. Over $205,000. Plans deposit $25. W. J. J. Chase, 140 Peachtree St., Atlanta, archt. CD 8/27—ENR 9/5.

Mich., Midland—Bd. Educ., 2 story, 135x300 ft., brick, stone, concrete, steel school. $400,000. Plans deposit $25. Bids 6/12 rejected. St. Clair Pardee, 111 Natl. Bank Bldg., St. Johns, and G. Wagschall Assoc., 1131 Majestic Bldg., Detroit, Zone 26, archts. CD 7/10—ENR 7/18, under LB.

Bids Asked October 1

Neb., Norfolk—State Bd. Control, L. R. Eby, secy., Lincoln, Female Ward Bldg. 21 at Norfolk State Hospital. J. C. Stitt & E. B. Watson, Norfolk, archts.; adv. ENR 9/12. CD 6/18—ENR 6/20, under LB.

Tex., Halfway (Plainview, P. O.)—Rural High School Dist. 2, Bd. Educ., T. Lewellen, Plainview, high school. $225,000. Plans deposit $25. J. C. Berry, Kerr & Kerr, 312-BW 10 St., Amarillo, archts.

LOW BIDDERS

Ga., Atlanta—Georgia School of Technology, Atlanta, Sept. 4, warehouse and maintenance bldg., from Wesley Constr. Co., 174 Alexander St. S.W. $56,871. CD 8/26—ENR 8/29.

Ill., Charleston—State Dpt. Registration & Educ., State Capitol, Springfield, Aug. 20, general contract power plant addn., Eastern Illinois State Teachers College, from J. L. Simmons Co., Inc., 2146 N. Woodford St., Decatur, $131,500***400 hp. boiler with stoker and accessories, from Springfield Boiler Co., 1901 E. Capitol Ave., Springfield, $130,500*** piping, tanks, heating, pumps and accessory equip., from H. P. Reger & Co., 1501 E. 72nd Pl., Chicago, $77,900***electrical wiring, from Anderson Electric Co., 42½ N. Vermilion St., Danville, $26,560. CD 8/1—ENR 8/8.

★**Ill., Joliet**—State Dpt. P. Safety, Armory Bldg., Springfield, Aug. 27, general contract altering West Cell House, Joliet Branch, Illinois State Penitentiary, from Federal Constructors, 407 S. Dearborn St., Chicago, $726,540***electrical work, from Public Electric Constr. Co., 3526 W. Lake St., Chicago, $63,945***heating, ventilating and plumbing, from Associated Piping Contractors, Inc., 1223 W. 18 St., Chicago, $66,896. CD 8/1—ENR 8/8.

★**Ill., Pontiac**—State Dpt. P. Safety, Armory Bldg., Springfield, Aug. 27, general contract altering North Cell House, Illinois State Penitentiary, from J. L. Simmons Co., 2146 N. Woodford St., Decatur, $915,000***heating, ventilating and plumbing work, from Carson-Payson Co., 616 N. Jackson St., Danville, $102,391***pipe covering work, from Paul J. Krez Co., 444 N. LaSalle St., Chicago, $18,584. CD 8/1—ENR 8/8.

Mass., Belchertown—Comm. of Mass., Dpt. Mental Health, 100 Nashua St., Boston, Aug. 30, brick, steel, infirmary-service bldg., from Platt Contracting Co., 99 First St., Cambridge. $835,000. CD 8/19—ENR 8/22.

★**Mass., Holyoke**—City, Wm. R. Peck, supt. Schools, Holyoke, project temporarily in abeyance, 2 story, bsmnt., brick, steel, stone Central Junior High School. $800,000. CD 10/11/44—ENR 10/19/44.

★**Mich., Ionia**—Ionia State Hospital, Ionia, brick, steel, rein.-con. power plant, at Ionia State Hospital, from Lansing Heating & Ventilating Co., 1213 Center St., Lansing. $908,000. CD 8/6—ENR 8/22.

Minn., Minneapolis — University of Minn., Bd. Regents, rejected bids Aug. 22, four 3 story, bsmnt., brick, steel, concrete, apartments, 27 and Como Aves., L.B. general contract, $202,932. CD 8/15.

★**N. Y., New York**—New York City Housing Auth., 122 E. 42 St., Zone 17, Sept. 4, general contract James Weldon Johnson Houses, Proj. NYS-21, in area bounded by E. 112 to 115 Sts., Park to 3 Aves., from Wilaka Constr. Co., 11 E. 44 St., Zone 17, $6,296,000***heating, from Heating Maintenance Corp., 220 E. 138 St., Zone 51, $537,250***electrical work, from E. A. Kahn & Co., Inc., 163-18 Jamaica Ave., Jamaica, $324,800***plumbing, from Lipsky & Rosenthal, 155 Utica Ave., Brooklyn, Zone 13, $1,095,370. CD 8/13—ENR 8/22.

Ore., Corvallis—Consolidated School Dist. 9, Aug. 28, Franklin School, from W. C. Smith, Inc., Bd. Trade Bldg., Portland, $319,877. CD 8/9—ENR 8/22.

Tex., Dallas—City, City Hall, rejected bids Aug. 16, 4 units of municipal market. L. B. $159,864. CD 8/20—ENR 8/22, under LB.

†**Va., Portsmouth**—Yards & Docks Annex, Navy Dpt., Arlington, postponed bids to have been opened Sept. 5, remodeling fire house. Spec. 18076, NOY 13976. CD 8/28.

CONTRACTS AWARDED

★**Ark., North Little Rock**—City, c/o F. O. Neely & Visking Corp., lessee, 6733 W. 65 St., Chicago, Ill., 1 story plastic plant, to Ditmars-Dickmann-Pickens Constr. Co., Gazette Bldg., Little Rock. Est. $600,000. Erhare Eichenbaum & Rauch, Pyramid Bldg., Little Rock, engrs.

Ia., Brooklyn—City, c/o Bd. Trustees Municipal Electric Plant, C. C. Ecklund, chn., power plant imprvs. incl. Diesel engine, generator, exciter auxiliaries, structural work, equipment foundations, etc., to Fairbanks Morse & Co., 9 and Harney Sts., Omaha, Nebr. $55,009. Bids 8/27.

Okla., Sand Springs — Bd. Educ., Sand Springs, central elementary school, to L. E. Smith Constr. Co., Daniels Bldg., Tulsa. $241,854. Awarded 8/23. J. R. Koberling, 316 Court Arcade, Tulsa, archt.

R. I., Scituate—National Guard, State House, Providence, 1 story, 65x265 ft., cinder block military motor storage garage, Spring Branch Ave., to General Engr. & Contr. Co., 12 Stokely St., Providence. Est. $60,000.

★†**Tex., Georgetown-Waco-Temple** — Pub. Housing Auth., Electric Bldg., Fort Worth, 455 housing units, to R. F. Ball Constr. Co., 3200 W. Dallas Ave., Houston, $850,000. CD 8/29.

Tex., San Antonio—City, Pub. Serv. Bd., 201 N. St. Marys St., natural gas plant imprvs., expan., force account. $125,000.

COMMERCIAL BUILDINGS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked About September 15

★**N. J., Camden**—Roman Catholic Diocese of Camden, The Most Rev. Bartholomew Eustace, Bishop, 721 Cooper St., hospital and nurses home. $1,500,000. P. O'Reilly, 111 5 Ave., New York, N. Y., archt. CD 6/28—ENR 7/11.

Bids Asked

★**Tex., Pelly** — Tri-Cities Home Builders, Inc., Pelly, 345 addnl. dwellings, $2,300,000; community shopping center, $210,000; building and paving streets, $60,000. CD 8/16—ENR 8/22.

SOON LETS CONTRACT

★**Neb., Scottsbluff**—Catholic Sisters of St. Francis, 2825 W. 32 Ave., soon lets contract hospital at St. Mary Hospital, $1,000,000. F. McNett, Grand Island, archt. CD 8/16—ENR 8/22.

★**Tex., Dallas**—J. C. Penney Co., 25½ Highland Park shopping Village, soon lets contract 13 story, bsmnt., steel brick, hollow tile department store, concrete pier fdn. $750,000. W. W. Aschlager, 212 S. St. Paul St., archt. CD 8/6—ENR 8/15.

LOW BIDDERS

La., Lafayette—Bendernagel & Cazale, archts, 8 Marlborough Gate, New Orleans, bids Aug. 5 postponed, seminary for Catholic Diocese, Lafayette. CD 7/31—ENR 8/8.

CONTRACTS AWARDED

Calif., La Mesa—O. D. Arnold & Sons, 3936-30 St., San Diego, 50 frame, stucco dwellings. Owner builds. $300,000. Alfred G. Mueller, 8226 Orange Ave., archt.

Conn., Torrington—Benny & Litke, 292 Church St., thirty 2 story, single homes, Bishop St. Owner builds. $210,000. Carl V. Johnson, 7 College Ave., archt.

★**Fla., St. Petersburg**—H. & W. Homes, Inc., 756 Bay St. N.E., 100 houses, own forces. $600,000.

Ga., Atlanta—W. R. Cox, 39 Forsyth St., shopping center, Peachtree Rds., own forces $250,000.

★**Ga., Atlanta**—O. T. Hennessee, Peters St S. W. 48 unit apartment, Buckhead dist., own forces. $500,000. CD 1/22—ENR 1/24.

Ga., Atlanta—O. T. Hennessee, 179 Peters St., SW., brick apartment, day labor. $225,000.

La., New Orleans—Apex Development Co., Inc., 3141 De Saix St., 64 houses, Labarre Rd., own forces. Over $300,000.

Mass., Abington—Pine Acres Assn., 130 Ashland St., 45 single frame houses, Washington St. Sect., Owner builds, $275,000.

Mass., Lynn—General Electric Co., 920 Western Ave., 3 story, 65x225 ft. brick, steel office bldg., to Turner Constr. Co., 38 Newbury St., Boston. $479,535. Charles T. Main, Inc., 201 Devonshire St., Boston, archt. CD 8/14—ENR 8/22.

Mass., West Roxbury—Buchanan Village Development, E. R. Eisenberg, 69 Summer St., Boston, 55 frame homes, Shrewsbury, Center and Truman, Sts., etc., to Weld Constr. Co., Inc., 69 Summer St., Boston, Est. $467,500. S. S. Eisenberg, 69 Summer St., Boston, archt.

Miss., Greenville—Tennessee Gas & Transmission Co., c/o F. L. McCurdy, supt., Greenville, compressor engine bldg. addn., own forces. $260,000.

Mo., St. Louis—E. Meier, 6709 Clayton Ave., fifteen 2 story, bsmnt., 34x45 ft., brick, concrete apartment bldgs. of 4 units each, 3908-3970 Jamieson Ave., own forces and sub-contracts. $270,000. J. A. Grunik, 6635 Delmar Blvd., University City, St. Louis, 5, archt.

N. J., Asbury Park—Medical Arts Bldg., Corp., 501 Grant Ave., 5 story, 75x90 ft., brick, steel medical arts bldg., to John J. Wise & Co., Inc., 67 W. 44 St., New York, N. Y. $250,000. Bids 7/26 awarded 8/27. C. H. Wolf, 112 S. 16 St., Phila. Pa., engr. CD 7/26.

N. J., Landis Twp. (Vineland P. O.)—J. J. Daneri, North West Blvd., Vineland, residential development, separate contracts. $240,000.

N. Y., Buffalo—Brost Motors, Inc., 1291 Main St., 2 story, bsmnt., 100x275 ft., structural steel, rein.-con., brick motor sales and service addn., to Siegfried Constr. Co., Inc., 6 N. Pearl St. Over $205,000. J. G. Schwartz, 810 Main St., East Aurora, archt. Taylor Weinzler, 140 Delaware Ave., engr.

N. Y., Buffalo—Children's Aid Society, 70 W. Chippewa St., 2 story, bsmnt., 98x102 ft., L-shaped, structural stee., rein.-con., brick office bldg., Delaware Ave. and Tracy St., to Siegfried Constr. Co., Inc., 6 N. Pearl St. over $200,000. J. W. Kideney, Prudential Bldg., archt.

N. Y., Buffalo—Flint & Kent, Main St., 4 story, bsmnt., 40x100 ft. addn. and 4th story added, over Pearl St. end of 100x160 ft. department store, brick, Indiana limestone to Siegfried Constr Co., Inc., 6 North Pearl St. $275,000. Duane, Lyman & Assoc., 505 Delaware Ave., archts.

★**N. Y., Buffalo**—Tudor Plaza Corp., 741 W. Ferry St., 9 story, bsmnt., 85x212 ft., 100 family structural steel, rein.-con., Indiana limestone brick apartment, to Boehm Constr. Co., 439 Elm St. $1,000,000. Green & James, 250 Delaware Ave., archts.

N. Y., Buffalo—Waldorf System, Inc., 169 High St., Boston, Mass., 1 story, bsmnt., structural steel, rein.-con., terra cotta restaurant, 7 E. Huron St. and Roosevelt Plaza, to Schultz Constr. Corp., 1819 Bway., New York. $274,000. Est. $225,000.

★**N. J., Pennsauken**—Sylvester J. Lowery, 1716 W. Cheltenham Ave., Phila., Pa., apartment development, separate contracts. $500,000. R. Knopf, 505 Cooper St., Camden, archt.

O., Cleveland—Ohio Bell Telephone Co., 750 Huron Rd., 2 story, bsmnt., 44x98 ft., brick, steel, addn. to Glenville Exchange, 12223 St. Clair Ave., to Hunkin-Conkey Constr. Co., 1740 E. 12 St. Est. $370,000. CD 8/29—ENR 9/5.

COMMERCIAL BLDGS. (Contracts Awarded. Cont'd.)

Pa., Drexel Hill—Wm. D. Kirk, McClatchey Bldg., Upper Darby, residential development, separate contracts, over **$205,000.**

Pa., Drexel Hill—P. S. Mozino, Drexel Hill, duplex development, over **$205,000;** residential development, Bridge St., **$240,000,** separate contracts.

★**Pa., Phila.**—Maurice Heiviel, Inc., Melrose Park, 250 residential development, Mt. Airy Sect., separate contracts, **$2,000,000.**

Pa., Phila.—Howard Clothes, Inc., 160 Tilry St., Brooklyn, N. Y., bldg. alterations, to Mestel Store Constr. Co., 124 Forest St., Brooklyn, N. Y., over **$205,000.** CD 6/6—ENR 6/27.

Pa., Phila.—Improved Properties Corp., 214 S. 12 St., residential development, Ditman and Meridian Sts., to De Marco Constr. Co., 214 S. 12 St., **$250,000.** Awarded 8/27. H. Kerrigan, 18 E. Mt. Airy Ave., archt.

★**Pa., Phila.**—Majestic Hotel, Broad St. and Girard Ave., hotel addns., alterations, to Golder Constr. Co., Market St. National Bank Bldg., **$502,000.** Wm. H. Lee, 16 S. Broad St., archt. Awarded 8/28.

★**Pa., Phila.**—Mittleman & Sons, 4617 C St., residential development, separate contracts, **$500,000.**

Pa., Sharon Hill—Rittenhouse Constr. Co., 1420 Chestnut St., Phila., residential development, separate contracts, **$340,000.** F. L. Petrillo, 1420 Chestnut St., Phila., **archt.**

★**Pa., Upper Darby**—John H. McClatchy, McClatchy Bldg., residential development, Margate Rd., separate contracts, **$500,000.** CD 2/2/45—ENR 3/8/45.

★**Pa., Upper Darby**—P. S. Mozino, Drexel Hill, residential development, separate contracts, **$700,000.**

R. I., Pawtucket—Pawtucket Credit Union, 727 Central Ave., 1 story, 30 to 35 homes, to Alphage Ferland Sons, 693 Benefit St. Est. **$205,000.**

Que., Pointe du Lac—Reverend Christian Brothers, Pointe de Lac, seminary and school, to J. P. Morin, Cap de la Madeleine. Est. **$250,000.**

INDUSTRIAL BUILDINGS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Mass., Walpole—STORAGE—The Ranger Co., Walpole, (selected list of bidders) 1 story, brick, concrete storage bldg. incl. boiler plant, $55,000. F. Buton Mitchell, 5 Mechanic St., Foxboro, archt.

★**Tex., Port Arthur — PLANT — Gulf Oil** Corp., Pt. Arthur, constructing Oil Distillery Plant Units 1 and 2. $2,000,000 each. CD 9/4.

★**Tex., Texas City** — PLANT — Monsanto Chemical Co., Texas City, styrene plastic mfg. plant, $750,000; converting, imprv. styrene plant, $500,000. CD 8/13/45 — ENR 8/23/45.

Tex., Waco—BAKERY—Jones Fine Bread Co., Waco, bakery. $55,000. CD 10/17—ENR 10/25.

Ont., Toronto—WAREHOUSE—Frederic B. Stevens of Canada Ltd., 2368 Dundas St., W., 1 and part 2 story, 35x150 ft. concrete, steel, brick warehouse and office, Royce Ave. near Lansdowne Ave. About $60,000. J. B. Parkin, 648 Church St., archt.

Que., Montreal—FACTORY—S. Mongeau & Co. Ltd., 84 Boyd St., factory addn.

SOON LETS CONTRACT

Ala., Abbeville—PLANT—Farmers Co-operative, Inc., Abbeville, soon lets contract 1 story, concrete, steel, 500 freezer locker plant. Sizemore & Campbell, 16 S. Hull St., Montgomery, archts.

Mass., Framingham—BUS TERMINAL—Boston, Worcester & New York Co., 855 Worcester Rd., soon lets contract 1 story, brick, concrete bus terminal addn. $55,000. Andrews, Jones, Biscoe & Goodsell, 50 Congress St., Boston, archts.

Pa., Phila.—POWER PLANT—Office of Edward P. Simon, archt., 123 S. Broad St., soon lets contract, power plant alterations, for Drexel Institute of Technology, 32 and Chestnut Sts. $75,000.

Tex., San Antonio — PLANT — Southern Pecan Shelling Co., 135 E. Cevallos St., soon lets contract pecan shelling mfg. unit. $60,000.

LOW BIDDERS

O., Cleveland—SALES and SERVICE GARAGE—Perco Motors Co., c/o Miller & Voinovich, archts Swetland Bldg., project in abeyance, 1 story, 80x160 ft., brick sales and service garage, 3471 E. 93 St. **$55,000.**

Tex., San Antonio—PACKING PLANT— E. K. Melton, 400 Medio St., project abandoned, meat packing plant. **$200,000.** CD 3/29—ENR 5/2.

Tex., San Antonio—PLANT, etc.—San Antonio Oil Works, 1921 S. San Marcos St., project abandoned, reconstructing plant bldgs., **$175,000;** reconstructing warehouse, **$75,000.** CD 9/5/45—ENR 9/20/45.

Tex., Waco — PLANT — Chlorine Solutions Co., c/o J. Pierson Kittess, Waco, project abandoned, Units 2 and 3 plant addns. **$100,000** each. CD 1/4—ENR 1/14.

Tex., Weslaco—PLANT—Texas Citrus Exchange, Weslaco, project abandoned, livestock molassas feed mfg. plant. **$55,000.** CD 11/21—ENR 12/6.

CONTRACTS AWARDED

Ala., Birmingham—WAREHOUSE—Frisco Lines, 107 N. 20 St., railroad freight warehouse, to Day & Richardson, 429 S. 24 St. Est. **$246,000.** CD 8/22—ENR 8/29.

Calif., Burbank—PLANT—Freeze-It Corp., 10 W. Magnolia St., 1 and part 2 story rein.-con. cold storage plant, loading dock, spur track, etc., to Wm. J. Moran Co., 1011 S. Freemont St., Alhambia. Approx. **$350,000.** Homer D. Rice, 1272 S. Bronson Ave., Los Angeles, archt. CD 5/24—ENR 5/30.

Calif., Davis—PLANT—Fruehauf Trailer Co., 2030 3 St., San Francisco, design and construction steel trailer production mfg. plant, Davis Hy., to Collins Constr. Co., 16 W. 10 St., Kansas City, Mo. Est. **$175,000.**

Calif., Los Angeles—WAREHOUSE and FACTORY—Fred H. Reynauld & Co., 1014 W. 8 Pl., steel, concrete, iron warehouse and factory bldg., frame and stucco office extens., 190 St. and Broadway. Owner builds. **$150,000.**

Calif., San Gabriel—FACTORY—Claysmiths, Inc., 2966 Colorado St., Pasadena, masonry factory, S. San Gabriel Blvd. Owner builds. **$55,000.** Gable & Wyant, 3723 Wilshire Blvd., Los Angeles, archt.

Calif., Vallejo — WAREHOUSE — General Mills Inc., 160 New Montgomery St., San Francisco, design and construction warehouse, loading dock, to Utah Constr. Co., 1 Montgomery St., San Francisco. Est. **$174,000.** CD 8/21—ENR 8/29.

Calif., Whittier — PLANT — Cherry River Paper Co., 205 N. Glendale Ave., Glendale, brick, steel, rein.-con. mfg. plant, to Waale Camplan Co. & Smith, Inc., 1670 Beverly Blvd., Los Angeles. Approx. **$250,000.** E. E. Woerfel, 5311 N. 34 St., Milwaukee, Wis., archt. Walter Oeflein, Inc., 5345 N. Hopkins St., Milwaukee, Wis., engr.

Calif., Willits—PLANT—Ralph Padula, 459 N. Kilkea Dr., Los Angeles, design and construction steel plant, to Harrah Bros. Machine Works, Main St. Est. **$125,000.**

Conn., Bridgeport—AUTO SERVICE, etc.—Edwards Motors, Inc., 770 State St., 190 Wilson St., 1 story, 90x125 ft., brick, concrete auto service and showroom, Fairfield and Astor Sts., to Henry & Gerrity, 94 Duane St., Fairfield. Est. **$55,000.** Lyons & Mather, Inc., 211 State St., archt. CD 3/23.

Conn., Meriden—GARAGE—Carl F. Boehle, 113 N. Pearl St., 1 story, 65x100 ft. and 65x100 ft. automobile repairing garage, storage and maintenance facilities, to Loucks & Clarke, 6 Ernest St., Wallingford. Est. **$76,000.**

Ga., Atlanta—SERVICE GARAGE—Consolidated Realty Co., 32 Pryor St. NE., auto bldg. with service garage, own forces. **$75,000.**

Ill., Rock Island—PLANT—**Servus** Rubber Co., 1100 Block and Second Sts., 3 story plant addn., to Greenleaf Constr. Co., Rock Island. **$200,000.** B. A. Horn & F. W. Horn, Rock Island, archts.

Mass., Cambridge—WAREHOUSE—Bethlehem Steel Co., 8 and Lehigh Sts., Bethlehem, Pa., 2 story, 32x35 ft. and 1 story, 70x300 ft. warehouse and office, Ridge Ave., to McCutcheon Co., 250 Stuart St., Boston. **$175,000.**

Mich., Ishpeming—LABORATORY, etc.—Interlake Iron Co., Div. of Jones & Laughlin Ore Co., Ishpeming, brick, steel, concrete laboratory and ore dressing building, to MacDonald & Kaake, Marquette, Est. **$120,000.**

★**Miss., Jackson**—GENERATION STATION—Mississippi Power & Light Co., c/o R. I. Brown, pres., 246 E. Capitol Ave., design and construction 30,000 kva. steam electric generation station, to Ebasco Services, Inc., 2 Rector St., New York, N. Y. **$4,500,000.** CD 8/30—ENR 9/12.

N. H., Newport—MILL—Dorr Woolen Co., Newport, 3 story, brick mill addn. Owner builds. **$90,000.**

N. J. Lakewood—BUS TERMINAL, etc.—Lincoln Transit Co., Lakewood, 1 story, bsmnt., 50x100 ft., concrete block, steel bus terminal and garage, to M. C. Yaskin, 5934 Baltimore Ave., Phila., Pa., **$200,000.** Awarded 8/28. The Ballinger Co., 105 S. 12 St., Phila., Pa., archts.

N. Y., Buffalo—BOILER PLANT—Larkin Co., 745 Carroll St., 1 story, 45x150 ft., structural steel, rein.-con., brick boiler plant with coal silos, 745 Carroll St., to Siegfried Constr. Co., Inc., 6 N. Pearl St., **$250,000.** J. G. Schwartz, 810 Main St., East Aurora, archt.

N. Y., East Aurora — FACTORY, etc.—Fisher-Price Toys, Inc., East Aurora, 1 story, bsmnt., 180x360 ft., structural steel, rein.-con., brick, factory, warehouse and office, to Siegfried Constr. Co., Inc., 6 N. Pearl St., Buffalo. **$400,000.** J. G. Schwartz, 810 Main St., archt.

N. Y., North Tonawanda—WAREHOUSE—Durez Plastics & Chemicals, North Tonawanda, 1 story, 160x200 ft., structural steel, rein.-con., brick finished products warehouse, to Siegfried Constr. Co., Inc., 6 N. Pearl St., Buffalo, **$400,000.**

N. Y., Tonawanda — CRANEWAY — Lake Erie Eng. Corp., Riverview and Woodward Aves., Kenmore, Buffalo, 1 story, 80x50x115 ft. structural steel, rein.-con., brick craneway bldg., Woodward Ave., to Siegfried Constr. Co., Inc., 6 N. Pearl St., Buffalo, **$100,000.** J. G. Schwartz, 810 Main St., East Aurora, archt.

N. C., Matthews — MILL — Longleaf Mills, Inc., A. R. Davis, Charlotte, yarn mill, to McDevitt & Street Co., Builders Bldg., Charlotte. Est. **$100,000.** J. N. Pease & Co., 119½ E. 5 St., Charlotte, archts.

O., Niles—FACTORY—American Brakeshoe Co., 230 Park Ave., New York, 1 story, part mezzanine, 60x300 ft. and 120x120 ft. brick, steel, concrete factory and office bldg., to James Stewart Co., 230 Park Ave., New York. Est. **$350,000.** CD 8/22—ENR 8/29.

Okla., Oklahoma City—SALESROOM—Fred Jones, Inc., 200 S. Harvey Ave., 140x175 ft. automobile salesroom, to W. E. Price Constr. Co., 1627 W. Main St., **$275,000.** Awarded 8/21. Sorey Hill & Sorey, First Natl. Bank Bldg., archts.

Ore., Portland—GARMENT FACTORY—Pacific Garment Co. of Oregon, Ltd., 316 S.W. 11 St., 1 story, 66x200 ft., and 34x100 ft. rein.-con. or concrete garment factory, to O. Wayland, Lewis Bldg. Est. **$75,000.** H. A. Herzog, Henry Bldg., archt.

Pa., Darby — HOSIERY MILL — Artcraft Hosiery Co., 123 S. Broad St., Phila., concrete block, structural steel concrete hosiery mill, to L. Shaffer, 926 Walnut St., Phila., $55,000. Awarded 8/28.

Pa., Phila. — PLANT — Jaegle Paint & Varnish Co., 1607 S. 20 St., mfg. plant addns., alterations, to John P. Hallahan Co., 2015 Sansom St., **$55,000.** Awarded 8/29.

Pa., Phila.—PLANT—A. Phillips, 1223 S. Grove St., 1 story, 50x128 ft., brick plant, separate contracts, over **$55,000.** CD 7/22—ENR 8/8.

Pa., Phila.—FACTORY—Victory Metal Mfg. Co., Front and Wharton Sts., 1 story, 54x100 ft., brick, concrete block, concrete floor factory addn., to D. Iovacchini, 115 S. Fairview Ave., Highland Park, **$60,000.** Awarded 8/27. T. Norman Mansell, 262 S. 17 St., archt. A. Macaluso, 262 S. 17 St., assoc. archt. C. H. Wolf, 112 S. 16 St., engr.

Pa., Wyncote—GARAGE—James P. Leaming, Glenside Ave., 1 story, 120x160 ft., stone, steel garage, separate contracts, **$65,000.**

★**Tenn., Chattanooga**—PLANT—E. I. du Pont de Nemours, c/o W. E. Gladding, du Pont Bldg., Wilmington, Del., nylon yarn plant, own forces, **$20,000,000.** CD 8/14—ENR 8/22.

Tenn., Memphis—WAREHOUSE—U. S. Rubber Co., c/o B. J. Brady, mgr., 713 Linden St., 1 story 150x300 ft. brick, concrete, steel warehouse, to Seth E. Glem, 166 Monroe Ave. Est. **$200,000.** Raymond B. Spencer, 1st National Bank Bldg., archt.

Tex., Cisco — PLANT — Cisco Pecan Co., Cisco, pecan shelling plant, Purchase & Hire Approx. **$55,000.** CD 7/17—ENR 7/26.

Wis., Beloit — FACTORY — Beloit Iron Works, 815 2 St., 1 story, 130x190 ft., steel metal siding factory addn., to Cunningham Bros., 359 E. Grand Ave. Est. **$198,000.** CD 7/12—ENR 7/18.

Wis., Stevens Point—WAREHOUSE—Central Co., 2 St., 1 story, bsmnt., 60x225 ft., steel, concrete block warehouse, concrete fdn., to J. Borski, Stevens Point, F. J. Spalenka, 432 Normal Ave., archt. CD 5/13—ENR 5/16.

Wis., West Milwaukee—WAREHOUSE—Harnischfeger Corp., 4400 W. National Ave., 3 story, 55x240 ft., rein.-con., concrete block warehouse, to Walter W. Oeflein, Inc., 5345 N. Hopkins St., Milwaukee, Zone 9, Est. **$193,000.**

★**N. B., Edmundston**—MILL—Fraser Companies, Ltd., A. Crabtree, pres., Plaster Rock, pulp mill, to Foundation Co. of Canada Ltd., 1538 Sherbrooke St. W., Montreal, Que. about **$4,000,000.** F. O. Smith, c/o owner engr. CD 9/30/43—ENR 10/7/43.

UNCLASSIFIED

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

LOW BIDDERS

★**Ill., Chicago**—SUBWAY—City of Chicago, Subways & Superhighways, 20 N. Wacker Dr., Aug. 29, Dearborn St. Subway, Contr. D-8, from Peter Kiewit Sons Co., 38 S. Dearborn St., and S. A. Healy Co., 221 N. LaSalle St. **$8,235,135.** CD 7/24—ENR 8/1.

CONTRACTS AWARDED

★**Indiana** — POWER LINES — Knox Co. Rural Elec. Membership Co-operative, Vincennes, 530 mi. electrification power lines, Knox, Pike and Rosey Counties, own forces **$775,000.**

LAST MINUTE CONSTRUCTION REPORTS

WATER SUPPLY

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked September 20

Tex., Childress — City, c/o H. C. Prislar, mayor, WW imprvs. **$158,000.** Plans deposit $20. D. T. M. Davis, P. O. Box 536, engr. CD 8/29—ENR 9/5.

Bids Asked September 25

Tex., Luling — City, c/o J. M. Rabon, mayor, 300,000 gal water supply storage tank, steel tank and tower. **$40,000.** Plans deposit $5. Koch & Fowler, Great National Life Bldg., Dallas, engrs.

Bids Asked September 27

Ore., Brownsville — City, City Hall, reservoir and distr. sys. **$25,000.** Plans deposit $15. Cornell, Howland & Merryfield, Rennie Bldg., Corvallis, engr.

Bids Asked October 4

N. Y., Niskayuna — At office, R. W. Peters, town atty, 514 State St., Schenectady, waterworks sys. Plans deposit $25. Keis & Holroyd, 257 Bway., Troy, consult. engrs.; adv. ENR 9/12.

Bids Asked October 8

Ia., Burlington — Burlington Municipal Waterworks, M. E. Driftmier, supt., 314 N. 4 St., 2 gasoline engine driven centrifugal pump. units. Alvord, Burdick & Howson, 20 N. Wacker Dr., Chicago, Ill., consult. engrs.; adv. ENR 9/12.

LOW BIDDERS

★**Wash., Olympia** — City, City Hall, Sept. 3, water supply line from McAllister Springs, from Morrison-Knudsen Co., Inc., 319 Bway., Boise, Idaho. **$1,574,151.** CD 8/14—ENR 8/22.

CONTRACTS AWARDED

★**Mich., Saginaw** — Saginaw-Midland Water Dist., Saginaw, water supply line from Saginaw Bay to supply water sys. 1 section, to Bass Constr. & Engrg. Co., 215 Birmingham Theatre Bldg., Birmingham, **$507,861***** 5 sections, to L. W. Wells, Saginaw, **$414,143** ***1 section, to W. J. Meagher, Bay City, **$79,029.** Grand total $1,001,033. CD 8/2—ENR 8/8.

★**Tex., Dallas**—City, Earl Goforth, secy., addn., imprvs. to Backman water purification plant, Sect. 2, Clear Watermain 2, and exten. filter house, to Norgaard & Shaw & Vilbig Const. Co., 817 Bourbon St. **$562,110.** CD 9/6—ENR 9/12, under LB.

Tex., Houston — Gardens-Sub-Division, c/o Howe & Wise, Stewart Bldg., c.i. water lines, to George Constr. Co., 1100 Market St. **$28,170.**

Que., Grand'Mere — City, J. Belgue, mgr., WW., own forces. About **$56,035.** P. Villemure, co owner, engr.

SEWERS, WASTE DISPOSAL

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked September 23

Ore., Sandy—City, E. C. Leum, city recdr., 58 Main St., sewerage sys. and disposal plant. **$75,000.** H. L. Gilbert, 406 Governor Bldg., Portland, engr. CD 9/4—ENR 9/12.

Bids Asked September 25

Tex., Luling—City, sanitary sewer extens. $40,000. Plans deposit $5. Koch Fowler, Great National Life Bldg., Dallas, engrs.

Bids Asked September 30

Calif., Sacramento—Sanitation Dist. 1, Court House, sewage force main, 2 mi. south of here. H. N. Jenks, 245 Madrono Ave., Palo Alto, engr.

Ore., Sweet Home—City, I. K. Hoy, mayor, City Hall, sewage treatment plant and 6½ mi. 8 to 12-in. sewer mains. **$150,000.** Stevens & Koon, Spalding Bldg., Portland, engrs. CD 4/4—ENR 4/18.

Bids Asked October 10

Calif., Los Angeles—State Div. Hys., State Bldg., Los Angeles, storm drain, sanitary sewer appurtenant to four-level grade separation structure, adjacent to Hollywood Parkway between Diamond St. and Sunset Blvd. G. T. McCoy, state hy. engr.

CONTRACTS AWARDED

Minn., Hopkins—Village, J. R. Carroll, clk., sanitary sewers in various streets, to Orfel & Mariani, 1744 Sheridan Ave., St. Paul. **$69,475.** Bids 9/3. CD 8/21—ENR 8/29.

★**Tex., Houston**—City, storm sewers, Country Club Bayou, to Holland Constr. Co., Rte. 3, Box 49, **$862,445.** CD 9/4—ENR 9/12, under LB

BRIDGES

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked September 17

Massachusetts — State-County-Town, 100 Nashua St., Boston, bridge and approaches, Barker Rd., Pittsfield. Over $40,000. Plans deposit $5. Dpt. P. Wks., 100 Nashua St., Boston, engrs.

Bids Asked September 18

Maine—State Hy. Comn., Augusta, rein.-con. bridge over Peasley Brook, Patten, Penobscot Co., over $40,000; Charles West and Louis West Bridges over Charles West River, Bert Wells Bridge over Merriland River, Wells, York Co. Over $40,000. Plans deposit $15 each.

CONTRACTS AWARDED

Washington—State Hy. Dpt., Olympia, steel, concrete overcrossing on Primary State Hy. 3, vicinity Swauk Creek, Rittitas Co., to Northwest Hauling Co., Securities Bldg., Seattle, Zone 1. **$52,274.** Bids 9/4. Received no bids Sept. 4, bridge, Wahkiakum Co. CD 8/20—ENR 8/22.

Ont., Embrum—Russell Twp., J. A. Lacombe, clk., 115 ft. span concrete bridge, to John Chisholm, Embrum, about **$45,000.**

STREETS AND ROADS

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked September 17

Massachusetts — State-County-Town, 100 Nashua St., Boston, hy. imprv. Lowell St., Wilmington, over $40,000; Hawthorne St., Lenox, over $40,000. Plans deposit $5 each. Dpt. P. Wks., 100 Nashua St., Boston, engrs.

Bids Asked September 20

Calif., Merced—City, City Hall, paving part of J St. $51,000. G. E. Winton, City engr. CD 11/24/43—ENR 12/2/43.

Bids Asked September 24

†**California**—Pub. Rds. Admin., Phelan Bldg., San Francisco, 4.831 mi. Proj. Calif-FH 96-A, Mosquito Ridge, Tahoe National Forest, Placer Co. Plans deposit $10. C. C. Morris, div. engr.

Ohio—State Hy. Dpt., Columbus, asphaltic concrete resurfacing 0.655 mi. S.H. 520, Cuyahoga Co., $50,640; 7.457 mi. S.H. 357, Fairfield and Perry Counties, $64,700; 0.313 mi. S. Hy. 652, Licking Co., $6,180; 2.029 mi. S. Hy. 83, Mahoning Co., $37,440; 0.547 mi. S.H. 356, Perry Co., $11,520; 2.338 mi. S. Hy. 274, Sandusky Co., $38,670; 1.491 mi. S. Hys. 306 and 946, Williams Co., $29,200; grading, drainage structures, asphaltic concrete resurfacing 1.948 mi. S.H. 999, Noble Co., $72,100; grading, draining, bituminous road mix paving 0.259 mi. S.H. 850, Stark Co., $13,050; placing slag fill for slope protection 1.25 mi. S.H. 38, Trumbull Co., $111,550; 0.5553 mi. S. Hy. 87, U. S. 224, Mahoning and Portage Counties, $90,100.

Bids Asked September 26

Florida—State Rd. Dpt., Tallahassee, grading, sand-clay surface treated paving, surfacing 5 timber bridges, 9.446 mi. Rd. 96, between Waukeenah and Monticello, FASP S-158 (1), Job 5407-201. $115,000. H. P. Coloney, hy. engr.

Bids Asked October 1

Tex., Tahoka—Lynn Co., c/o Judge, 18.25 mi. farm to market road, incl. grading, draining streets, flex. base and asphalt surfacing. $100,000. Plans deposit $25. Hasle & Green Eng. Co., Tahoka, engr. CD 3/14—ENR 4/4.

Bids Asked October 3

California—State Div. Hys., State Bldg., Los Angeles, plant mix surfacing, bituminous surface treating 1.5 mi. between Sproul St., Anaheim-Telegraph Rd., Los Angeles Co. G. T. McCoy, hy. engr.

LOW BIDDERS

★**Pennsylvania**—State Hy. Dpt., Harrisburg, Sept. 6, imprv. 1.19 mi. Allegheny Co., from Dinardo, Inc., 331 Bouquet St., Pittsburgh, **$308,217*****0.61 mi. Cambria Co., from L. R. Owen Co., Johnstown, **$51,036*****1.01 mi. hy. and 1 plate girder bridge and 1 concrete I-beam bridge, Cambria Co., from Ferguson & Edmondson Co., Keystone Bldg., Pittsburgh, **$284,757*****0.42 mi. Crawford Co., from The Baldwin Brothers Paving Co., Union Commerce Bldg., Cleveland, O., **$49,682*****0.24 mi. Bucks Co., from James McGraw Co., Commercial Trust Bldg., Phila., **$131,718*****1.92 mi. hy. and I-beam bridge, Montgomery Co., from J. F. Keelor, Perkiomenville, **$447,941*****5.46 mi. hy., 5 concrete bridges and exten. 1 concrete bridge from Robesonia to Sinking Springs, Berks Co., from C. W. Good, Inc., Lancaster, **$906,826*****1.25 mi. Washington Co., from Allegheny Asphalt & Paving Co., 411 Blvd. Allies, Pittsburgh, **$171,575*****0.13 mi. Westmoreland Co., from Weaver Constr. Co., Greensburg, **$39,697*****0.28 mi. Greene Co., from John E. Boyer, Washington, **$44,680.** CD 8/8, ENR 8/15.

CONTRACTS AWARDED

★**Massachusetts**—Commonwealth of Mass., 100 Nashua St., Boston, imprv. Beverly and Danvers Counties, to M. De Matteo Constr. Co., Hancock St., Quincy. **$681,124.** CD 8/16—ENR 8/22, under LB.

★**Minnesota**—State Hy. Dpt., St. Paul, imprv. 1217 mi. road in Minneapolis, to Moen Bros., Moorhead, **$254,891;** 10.4 mi. road in St. Paul, to McCree & Co., 918 New York Bldg., St. Paul, **$259,596.** CD 8/8—ENR 8/15.

★**New York**—Bureau Contracts & Accounts, Albany, imprv. 12.86 mi. Rte. 28 between Delhi and Andes, Delaware Co., to John Arborio, Inc., W. Cedar St., Poughkeepsie. **$1,408,141.** CD 7/26—ENR 8/1, under LB.

EARTHWORK, WATERWAYS

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked September 18

†**South Carolina**—Yards & Docks Annex, Navy Dpt., Arlington, Va., retaining wall, with creosoted timber. Plans deposit $10. Tentative date.

Bids Asked September 20

†**Washington**—Bureau Reclamation, Coulee Dam, preparation of concrete aggregates, Adrian Deposit, Columbia Basin Project, spec. 14 75; adv. ENR 9/12.

Bids Asked October 7

Tex., Houston—M. H. Westerman, city secy., concrete and earth dam on San Jacinto River, Harris Co., 28 mi. northeast of here, for San Jacinto River Water Supply Div. Plans deposit $30. G. L. Fugate, ch. designing engr. adv ENR 9/12. CD 9/13/45—ENR 9/27/45.

Bids Asked October 21

†**Washington**—Bureau Reclamation, Dpt. Interior, Denver, Colo., furnishing, del. f.o.b. cars at shipping point or f.o.b. cars at Pasco, one 2,500 kva., 13,200 volt delta to 2,400 volt delta, 3-phase, 60 cycle, oil-immersed, self-cooled, outdoor-type power transformer with provision for future addn. of forced-air cooling equipment and with 3 single-pole station-type lightning arresters for 13,800-volt, 3-phase, grounded-neutral circuit, mounted on the case, one 15,000 volt, 400 ampere, 3 pole single-throw, manually-gang-operated, outdoor-type, disconnecting switch, with manually-gang-operated grounding blades, three 15,000 volt, 200-ampere, single-pole, outdoor-type disconnecting fuses, each complete with two 150E-ampere fuse units, 3 single-pole outdoor, thyrite or autoclave, station-type lightning arresters designed for base mounting and suitable for use on 115,000-volt, 3 phase, grounded neutral circuit, 3 single-phase, outdoor, thyrite or autovalve, station-type lightning arrester, designed for base mounting and suitable for use on a 13,800-volt, 3-phase, grounded-neutral circuit, for Pasco Pump. Plant, switch-yard and substation, Columbia Basin Proj. Spec. 1481. W. R. Young, ch. engr.

LOW BIDDERS

★†**California**—Bureau Reclamation, Antioch, Sept. 6, earthwork, concrete lining, structures, Sta. L-185 plus 00 to Sta. L-774, plus 00, Delta-Mendota Canal Delta Div., Central Valley Proj., Spec. 1435, from Morrison-Knudsen Co., 111 Sutter St., San Francisco, and M. H. Hasler, Box 387, Santa Ana, **$3,025,121.**

†**Oregon**—U. S. Eng., Pittock Block, Portland, Aug. 16, reconstructing right bank along McKenzie River immediately downstream from Coberg Bridge from O. Butler & Son, 4900 N. E. 42 St., Portland. **$37,110.**

PUBLIC BUILDINGS

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked September 17

★**Man., Winnipeg**—Wartime Housing Ltd., 159 Bay St., Toronto, Ont., 300 houses. $1,500,000. CD 7/10—ENR 7/25.

Mo., Marshall—City, power plant imprvs. Over $55,000. Black & Veatch, 4706 Broadway, Kansas City, Mo., engrs. CD 8/15—ENR 8/22.

Bids Asked September 20

†**D. C., Wash.**—Pub. Bldgs. Admin., 18 and F Sts. N.W., Zone 25, remodeling 6 bldgs. for Bureau of Reclamation, Federal Center, Denver, Colo. Plans deposit $10.

Bids Asked September 26

Mass., Wrentham — Commonwealth of Massachusetts, Dpt. Mental Health, 100 Nashua St., Boston, brick, steel, concrete power plant at State School. $450,000. Plans deposit $10. D. D. Eames, 739 Boylston St., Boston, engr. CD 1/5/45—ENR 1/11/45.

PUBLIC BLDGS. (Bids Asked, Cont'd.)

Bids Asked October 7

Mich., Detroit—Comr. Purchases & Supplies, 735 Randolph St., 27,500 sq. ft. condenser, accessories for municipal power plant addns.; 2 boiler feed pumps, drivers; 3 closed feed water heaters; make-up evaporator with preheater condenser, accessories; 3 direct contact feed water heaters, 2 condensate pumps, feed water controls, equip. for Public Lighting Com. power plant addns., for Public Lighting Comn., 174 E. Atwater St.

Bids Asked October 9

†**Arizona-California**—Bureau Reclamation, Denver, Colo., furnishing, del. f.o.b. cars at shipping point or f.o.b. cars at Phoenix, 1 battery charger, control equip. for Phoenix substation, Parker Dam Power Proj. Spec. 1485.

LOW BIDDERS

★**D. C., Wash.**—District Comrs., District Bldg., Sept. 6, Richardson School, 53 and Blaine Sts. N.W., from J. D. Hedin Constr. Co., 820 Michigan Ave. N.E. **$511,200.** CD 8/23—ENR 8/29.

D. C., Wash.—District Comrs., District Bldg., Sept. 5, Lucy Diggs Stowe School, from Harwood-Nebel Co., 1520 K St. N.W., **$219,436.** CD 8/19—ENR 8/22.

★**Vt., Waterbury**—State, State Capitol, Montpelier, Sept. 5, two 3 story hospital wings, 3 story, bsmnt. nurses homes, all brick, steel, concrete, from Volpe Constr. Co., 54 Eastern Ave., Malden, Mass., **$544,700** and **$209,400** respectively. CD 8/22—ENR 8/29.

CONTRACTS AWARDED

Calif., Redwood City—City Elementary School Dist., two 1 story classroom bldgs., corner Charter and Stambaugh Sts., to Peter Sorensen, 927 Arguello St. **$205,036.** Ernest J. Kump Co., 251 Kearny St., San Francisco, archts.

COMMERCIAL BUILDINGS

Additional earlier Construction Reports will be found in the regular section.

CONTRACTS AWARDED

Ill., Chicago — Edison Park Builders, 6774 Northwest Hy., forty 2 story, brick residences, own forces.

Ill., Chicago — Illinois Masonic Hospital, 834 Wellington St., 5 story, 81x175 ft., brick, concrete, steel, stone hospital wing addn., to J. W. Snyder Co., 307 N. Michigan Ave. Est. **$350,000.**

★**Ill., Chicago** — University of Illinois, Physical Plant Dpt., 721 S. Wood St., remodeling Navy Pier into 100 classrooms, to M. J. McDermott Co., 30 N. LaSalle St. Est. **$600,000.** CD 8/27—ENR 9/5.

★**Ill., Chicago** — University of Chicago, 5750 Ellis Ave., 6 story, 50x220 ft., brick, limestone, rein.-con. administration bldg., to W. J. Lynch Co., 111 W. Washington Ave. Est. **$920,000.** CD 9/5/45—ENR 9/20/45.

Ill., Chicago — St. Christiana Parish, 11005 S. Homon Ave. 2 story, brick, concrete parochial school, to Frank Burke & Son, 35 S. Dearborn Ave. Est. **$280,475.** G. S. Smith, 8332 S. Luella St., archt.

★**Ill., Park Ridge** — Park Ridge Imprvt. Co., c/o contractory, one hundred twenty-five 2 story, brick residences, to Joseph T. Carp, Inc., 1791 W. Howard St., Chicago, Est. **$3,000,000.**

INDUSTRIAL BUILDINGS

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Calif., Merced—LOCKER—W. P. Clement, 407 22 St., 1 story, rein.-con., concrete block, frozen food locker bldg. 75,000. G. N. Hilburn, 1211 K St., Modesto, archt.

Conn., Shelton—TEXTILE MILL—Shelton Hosiery Mills, Inc., Shelton Ave., 2 story, bsmnt., 100x150 ft., brick, steel, hosiery textile mill. $150,000. L. F. Caproni, 1221 Chapel St., New Haven, engr. CD 8/29—ENR 9/12.

Mass., Chelsea—PUMP HOUSE—Jenney Co., 12 India St., Boston, 1 story pumphouse, piping, platform. $45,000. G. S. Guild, c/o owner, engr.

R. I., Providence—PLANT—American Laundry Co. Inc., c/o O. Gauvin, archt., 72 Weybosset St., 1 story, bsmnt., cinder block, cleansing and fur storage plant. Over $55,000.

LOW BIDDERS

Tex., Cost—PLANT—Guadalupe Valley Refrigeration, Co-operative, Inc., Gonzales, freezer locker plant, from J. B. Martin, 110 Pierce Ave., San Antonio. **$57,645.** CD 8/20—ENR 8/22.

CONTRACTS AWARDED

Calif., Oakland—WAREHOUSE—W. S. Plywood Corp., 570 3 St., 1 story, concrete warehouse, to Christensen & Lyons, 3454 Harlan St. Est. **$67,000.** Alben Froberg, 3454 Harlan St., archt.

Calif., Pittsburg—PLANT—Coca-Cola Bottling Co. of California, 1340 Cypress St., Oakland, 3 temporary quonset type plant bldgs., concrete fdns., to Swinerton & Walberg, 225 Bush St. San Francisco. Est. **$60,000.**

Conn., Springdale — FACTORY — Stamford Rolling Mills, Railroad, Springdale, brick, steel, rein.-con. factory addn., to F. D. Rich Co., Inc., 322 Main St., Stamford. Est. **$150,000.** CD 8/14—ENR 8/22.

Conn., Stafford — FACTORY — Drycor Felt Co., Belleville, N. J., 3 story, brick, concrete, wood factory, own forces. **$55,000.** Chandler & Palmer, 16 Franklin St., Norwich, archts.

Ill., Chicago—FACTORY—Bodine Elec. Co., 2254 W. Ohio St., 1 story, 101x278 ft., brick factory, to C. W. Haynes, 135 S. LaSalle St.; Plumbing to Northern Plumbing & Heating Co., 4617 N. Western Ave. Est. **$140,000.** Graham, Anderson, Probst & White, 80 E. Jackson Ave., archts.

N. H., Nashua—PLANT—Coronis Cleaners, 1 Eldridge St., 2 story, 70x150 ft., brick, concrete cleansing plant to H. P. Cummings Constr. Co., 14 Prospect St., Ware, Mass. Est. **$60,000.** CD 7/30—ENR 8/8.

O., Canton — WAREHOUSE — Dannemiller Grocery Co., Canton, brick, steel concrete warehouse, 3409 Navarre Rd., to Taylor Constr. Co., 1019 Ridge Rd. N.W. **$175,000.** Awarded 8/25.

Tex., Alpine—LEAD MINE—Bird Lead Mine, Alpine, lead mine expansion, imprvs. Owner builds. **$65,000.**

Tex., San Antonio—PLANT—Lone Star Cone Co., 406 S., Texas State Bank Bldg., cone mfg. plant, to C. L. Browning, Jr., 812 Insurance Bldg. **$58,500.**

Wash., Seattle—GARAGE—Pioneer Sand & Gravel Co., 901 Fairview Ave. N., 34x50 ft., masonry garage, day labor. **$75,000.** Naramore, Bain, Brady & Johnson, Dexter Horton Bldg., Zone 4, archts.

Wash., Seattle—FACTORY—Siler Mill Co., 5248 W. Marginal Way, frame box factory and sawmill, day labor. **$75,000.** H. R. Powell, Smith Tower, 2 Ave. and Yesler Way, Zone 4, engr.

★**Que., Montreal**—PLANT—Molson's Brewery Ltd., 1670 Notre Dame St. E., 4 story, bsmnt., 165x246 ft. steel, bottling plant, to Foundation Co. of Canada Ltd., 1538 Sherbrooke St. W., about **$1,350,000.** CD 12/13/45—ENR 12/20/45.

UNCLASSIFIED

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked September 17

La., Baton Rouge—AIR CONDITIONING—Louisiana National Bank, E. E. Moore, pres., installing 246 ton air conditioning sys. in 12 story, bsmnt. bank and office bldg. Plans deposit $25. C. B. Gamble & Assoc., 314½ St. Chas. Ave., New Orleans, engrs.

N. Y., St. George — TERMINAL WORK — Comr. Marine & Aviation, Pier A, foot of Battery Pl., North River, New York, Zone 4, plumbing, heating and electric facilities, Contr. 2507-A, 2507-B, 2507-C respectively, at temporary terminal.

Bids Asked September 18

Que., Ile aux Coudres—WHARF—Secretary Dpt. P. Wks., Ottawa, Ont., imprv. South Wharf. About $137,000. Plans deposit $20. R. Blais, c/o owner, engr.

Bids Asked September 24

California—FISHWAY—State Div. Architecture, Pub. Wks. Bldg., Sacramento, fishway reconstruction, Clough Dam, Mill Creek, Tehama Co. Anson Boyd, c/o owner, archt.

†**Calif., San Francisco**—PARK RESTORATION— U. S. Eng., 74 New Montgomery St., restoration premises, Aquatic Park Center. Ser. No. 04-203-47-29.

Bids Asked About September 25

Tex., McAllen — RADIO STATION —Valley Broadcasting Assn., Inc., Mission, radio broadcasting station. **$75,000.** CD 8/21—ENR 8/29.

Bids Asked October 9

Calif., Bakersfield—TRAFFIC SIGNALS—State Div. Hys., Pub. Wks. Bldg., Sacramento, traffic signals, illuminating devices between Brundage Lane and 21 St. G. T. McCoy, state hy. engr.

Bids Asked

Calif., Pasadena — LAUNCHER PROJECT — Rocket Div., General Tire & Rubber Co., 1030 E. Green St., furnishing in place rein.-con. for Navy Proj. (Spec. 460712) Morris Dam, San Gabriel Canyon, Los Angeles Co., to N. I. Fadel, 7101 N. Radford Ave., North Hollywood. **$290,176.**

Georgia — POWER LINES — Grady County Electric Membership Co-operative, Cairo, 450 mi. power lines, Decatur, Grady and Thomas Counties, to Irby Constr. Co., Jackson, Miss. **$446,021.**

Mass., Amherst—STEAM DISTRIBUTION—Commonwealth of Mass., Dpt. Educ., Boston, rejected bids Aug. 26, steam distribution, water line and underground piping, Mass. State College. L.B. **$37,535.** CD 7/31—ENR 9/5.

Texas — CRUDE OIL PIPELINE — Shell Pipeline Corp., Shell Bldg., Houston, 15 mi. 10 in. crude oil pipeline reconditioning on main between McCamey and Cushing, Okla., Wichica Falls Area. **$85,000.**

CONTRACTS AWARDED

Arkansas—POWER TRANSMISSION LINE—Woodruff Electric Co-Operative Corp., Berryville, 215 mi. power transmission lines, Woodruff Co., to K. & R. Constr. Co., Jonesboro, **$213,756.** R. Channaberry, 1510 Washington Bldg., Louisville, Ky., engr. CD 1/9—ENR 1/24.

Ark., Rector—GENERATING UNIT and DISTRIBUTION LINES—City, Diesel engine electric generating unit and distr. lines, to Universal Supply & Machinery Co., Box 165, Tulsa, Okla. **$150,000.**

Kansas — ELECTRIFICATION SYSTEM — Western Co-Operative Electric Assn., Wakeeney, general contract, $23 mi. rural electrification sys., Trego Co., to Cater Elec. Constr. Co., 1016 Baltimore, Kansas City. Est. **$100,000.** CD 11/13—ENR 11/22.

Mississippi—POWER LINES—Southern Pine Electric Power Assn., Taylorsville, 50 mi. power lines, Smith Co., to Collins Constr. Co., Collins, **$41,187.** Bowman & Bowman, Box 518, Greenwood, engrs.

Pa., Phila.—RECREATION CENTERS—City Dpt. Welfare, City Hall Annex, imprv., altering Waterview Recreation Center, to E. Clifford Durell & Sons, 3701 N. Broad St., **$39,622**; athletic recreation center, imprvs., alterations to M. & L. Constr. Co., Inc., 108 S. 40 St. **$43,888.** Awarded 8/28. CD 4/11.

Tenn., Knoxville — SWIMMING POOL — Knox County Park Bd., c/o R. W. Riggins, chrn., swimming and wading pool, to Johnson & Willard, 422 W. Front Ave. **$43,141.** CD 6/27—ENR 7/4.

Texas—CRUDE OIL PIPELINE CARRIER—Atlantic Pipe Line Co., Midland, 50 mi. 8 in. crude oil pipeline carrier between Crane and Midland, Purchase & Hire. **$375,000.** CD 8/21—ENR 8/29.

Texas — RURAL ELECTRIC POWER TRANSMISSION LINES—Bailey County Co-operative, Inc., Muleshoe, constructing 105 mi. rural electric power transmission lines, Bailey Co., force account. **$110,000.** REA Southwest Engrg. Co., 1724 S. Ewing St., Dallas, engr.

Texas — RECONDITIONING CRUDE OIL PIPELINE, etc.—Humble Pipe Line Co., Humble Bldg., Houston, reconditioning and repairing pipe, double-coated and double-wrapped for 25 mi. 8 in. crude oil pipe, and 25 mi. 8 in. butane pipe, Groesbeck area, Limestone Co., to Latex Constr. Co., Oil & Gas Bldg., Houston, approx. **$69,000.** CD 8/29—ENR 9/19.

Texas—TRANSMISSION LINES—B-K Electric Co-operative, Van Alstyne, 250 mi. rural electric power transmission lines, Baylor Co. Owner builds. **$250,000.** H. B. Gieb, Texas Bank Bldg., Dallas, engr. CD 10/5/45—ENR 10/18/45.

Texas—TRANSMISSION LINES—Grayson-Collin Electric Co-operative, Van Alstyne, 100 mi. rural electric power transmission lines, Grayson Co. Owner builds. **$100,000.** H. B. Gieb, Texas Bank Bldg., Dallas, engr. CD 10/10/45—ENR 11/1/45.

Texas — TRANSMISSION LINES — Magic Valley Electric Co-operative, Inc., Mercedes, 150 mi. rural electric power transmission lines, Higalgo Co., force account. **$187,000.** R.E.A. CD 6/28—ENR 7/11.

Texas—CRUDE OIL PIPELINE—Magnolia Pipe Line Co., Esperson Bldg., Houston, 50 mi. crude oil pipeline work between Richards and Normangee, to Bishop & Lock Constr. Co., Magnolia Bldg., Dallas. **$70,000.**

Texas—CRUDE OIL PIPELINE—Shell Pipe Line Corp., Shell Bldg., Houston, 32 mi. 10 in. crude oil pipeline reconditioning between Haskell and Wichita Falls, to Holland Constr. Co., Old Spanish Trail Rd., Houston, approx. **$165,000.** CD 9/9—ENR 9/19.

Tex., Dallas — NATURAL GAS MAINS — Lone Star Gas Co., 1915 Wood St., 34 mi. natural gas mains, Purchase & Hire. **$235,000.**

Tex., El Paso—STADIUM—College of Mines, El Paso, stadium, to J. E. Morgan & Sons, 210 N. Campbell St. **$48,715.**

Texas and Oklahoma—CRUDE OIL PIPELINE—Shell Pipe Line Corp., Shell Bldg., Houston, Tex., 41 mi. 10 in. crude oil pipeline reconditioning between McCamey, Tex., or Healdton, and Cushing, Okla., to Wood Engr. & Constr. Co., Cushing, Okla. Approx. **$316,000.**

Tex., San Antonio—GRANDSTAND—T. Brooks Wood, 647 Main St., San Antonio, and H. D. Storey, Cotulla, 10,000 seating capacity grandstand, bleachers, 100-acre ground grading and rodeo project development, Purchase & Hire. **$45,000.** CD 12/24—ENR 1/10.

Tex., San Antonio—NATURAL GAS LINES—City Pub. Serv. Bd., 201 N. St. Marys St., natural gas lines, force account. **$225,000.**

Tex., Wilmer—STREET LIGHTING SYSTEM—Texas Power & Light Co., Wilmer, street lighting sys., own forces. **$40,000.**

Que., Lauzon—DRY DOCK BOILERS—Dpt. P. Wks., Ottawa, Ont., replacing steam boilers at Champlain Dry Dock, to Metropolitan-Goulet Co. Ltd., Edifice Le Soliel, Quebec City. R. Blais, c/o owner, engr.

Proposal Advertisements see pp. 25 to 27

U. S. Government

COMMISSIONERS, D. C., Washington August 22, 1946. Sealed proposals will be received at Room 509, District Building, until 2:00 P.M., September 24, 1946, and then publicly opened and read, for furnishing materials and performing the work of reconstructing the bridge carrying the Baltimore and Ohio Railroad over Riggs Road, Northeast, Federal Aid Project FGI-52-(1). The principal quantities include 22,000 cubic yards of fill material; 1,600 cubic yards of concrete; and 355,000 pounds of steel. All bidders are hereby notified that any bid submitted in response to this advertisement must be accompanied by a statement of facts in detail of the business and technical organization of the bidder available for the contemplated work, including his financial resources. The Commissioners expressly reserve the right to reject any bid in which the facts as to the business and technical organization, financial resources or experience compared with the project bid upon and based upon past known performance justify such rejection. Certified check for $10.00, payable to the Collector of Taxes, D. C. to insure return in good condition, should accompany each request for proposals, specifications and drawing, to the Chief Clerk, Engineer Department, Room 427, District Building. Not more than three (3) sets of drawings and specifications will be furnished to any one contractor. (240)

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., August 26, 1946. Sealed bids (Specifications No. 1475) will be received at the office of the Bureau of Reclamation, Coulee Dam, Washington, until 10 a.m., September 20, 1946, and then publicly opened, for furnishing labor and materials and performing all work for the *preparation of concrete aggregates, Adrian deposit, Columbia Basin Project*, Washington. The work is situated about 1½ miles north of Adrian, Washington, except that blending sand may be obtained from the A. O. blending sand deposit located about 1½ miles northeast of the Adrian deposit. The principal items of work and the estimated quantities involved are as follows: Preparing and stockpiling sand and coarse aggregate at the Adrian deposit—120,000 cubic yards of excavation, stripping deposit; Preparing and stockpiling 170,000 cubic yards of sand; Preparing and stockpiling 75,000 cubic yards of coarse aggregate 3/16 to ⅜ inch in size; Preparing and stockpiling 88,000 cubic yards of coarse aggregate ⅜ to ¾ inch in size; and Preparing and stockpiling 132,000 cubic yards of coarse aggregate ¾ to 1½ inches in size. This invitation for bids does not cover the purchase of materials which are to be furnished by the Government. Materials to be furnished by the contractor and those furnished by the Government are described in the specifications which will be a part of the contract. The contractor shall begin work within thirty (30) calendar days after date of receipt of notice to proceed, and shall have prepared and stock-piled not less than 25 percent of each of Items 2, 3, 4, and 5, within one hundred and eighty (180) calendar days after date of receipt of notice to proceed, and shall complete all of the work under the schedule within six hundred and fifty (650) calendar days from the date of receipt of such notice. Bid bond.—Guarantee will be required with each bid in an amount not less than 10 percent of the amount of the bid: *Provided*, That guarantee in excess of $2,000,000 will not be required. Performance bond—Where the total amount payable by the terms of the contract is not more than $1,000,000, a performance bond will be required in the sum of one-half of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $1,000,000 and not more than $5,000,000, the performance bond shall be in the sum of 40 percent of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $5,000,000 and not more than $10,000,000, the performance bond shall be in the sum of 30 percent of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $10,000,000 and not more than $25,000,000, the performance bond shall be in the sum of 20 percent of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $25,000,000, the performance bond shall be in the sum of $5,000,000. Payment bond.—Whenever the total amount payable by the terms of the contract shall be more than $2,000

U. S. Government

but not more than $1,000,000, the payment bond shall be in the sum of one-half of the total amount payable by the terms of the contract. Whenever the total amount payable by the terms of the contract shall be more than $1,000,000 and not more than $5,000,000, the payment bond shall be in the sum of 40 percent of the total amount payable by the terms of the contract. Whenever the total amount payable by the terms of the contract shall be more than $5,000,000, the payment bond shall be in the sum of $2,500,000. Liquidated damages for delay will be fifty dollars ($50) per day for each calendar day's delay in the completion of each part of each schedule item for which a specific time for completion is specified. Partial payments will be made monthly. (See article 16 of the contract.) No charge to prospective bidders for copies of the specifications and drawings; to others $1.00 per copy, not returnable. For particulars, address the Bureau of Reclamation, Coulee Dam, Washington; Denver 2, Colorado; or Washington 25, D. C.

Michael W. Straus,
Commissioner.
(259)

OFFICIAL PROPOSALS

Bids: September 24 (251)

State Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commissioner for:

ROUTE 45, SECTION 22, and ROUTE 44, SECTION 9A

Construction of Route 45, Section 22, and Route 44, Section 9A, Westville to Verga, Gloucester County, length 1.741 miles. Federal Aid Project F-122 (6). Estimated:

Road Items

37,800 cu. yds. Roadway Excavation-Earth
30,300 cu. yds. Wet Excavation
69,600 cu. yds. Borrow Excavation
56,000 sq. yds. 9" Rein. Conc. Pavement Surface
6,700 sq. yds. 2" Pavement, Type A or T

Bridge Items

900 cu. yds. Foundation Excavation
1,330 cu. yds. Concrete in Structures
4,000 sq. ft. Pneumatically Applied Mortar
120,000 lbs. Structural Steel
61,000 lbs. Reinforcement Steel in Structures
17,000 lin. ft. Timber Piles

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, N. J., on Tuesday, September 24, 1946, at ten A. M., EASTERN STANDARD TIME, (eleven o'clock, DAYLIGHT SAVING TIME), and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualifications of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must also submit a revised financial statement and statement of plant and equipment with their bid.

NOTE: The proposed project is a "Federal Aid Project" authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements, and by Sections 2, 3, and 4, P. S. 521, 78th Congress, and is to be performed in accordance with the special provisions and requirements of the Federal Works Agency Public Roads Administration, as outlined in the specifications, which provisions require that labor be employed from lists furnished by the U. S. Employment Service, 29 Cooper Street, Woodbury, N. J. The attention of bidders is directed to the special provisions covering subletting or assigning the contract and to the use of domestic materials. The minimum wage paid to all unskilled labor employed on this contract shall be 65c per hour. The minimum wage paid to all intermediate grade of labor employed on this contract shall be 75c per hour. The minimum wage paid to all skilled labor employed on this contract shall be $1.25 per hour.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and may be

Official Proposals

inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made upon the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in sealed special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: Spencer Miller, Jr.
State Highway Commissioner

Bids: October 1 (250)

State Home

Sealed proposals for the construction of an EMPLOYEES BUILDING at the BEATRICE STATE HOME, BEATRICE, NEBRASKA, will be received at the office of the Board of Control, State Capitol in the city of Lincoln, Nebraska, until 2:30 o'clock P. M. on the first day of October, 1946, and will then be publicly opened and read.

All bids shall be made on the printed forms attached to and made a part of the proposed contract documents.

The plans and specifications may be examined at the offices of the Builders Exchange at Omaha and Lincoln, Nebraska.

Bidding contractors may obtain a set of plans and specifications for their individual use from JOHN O. UNTHANK, ARCHITECT, 1307 SHARP BUILDING, LINCOLN, NEBRASKA upon request.

Each bidder must submit with his bid a certified check or a bid bond in an amount equal to five percent (5%) of his base bid.

No bidder may withdraw his bid for at least thirty (30) days after the scheduled closing time for the receipt of bids.

The Board of Control reserves the right to reject any or all bids.

BOARD OF CONTROL
LOUIS R. EBY, SECRETARY

Bids: Sept. 23 (255)

Constructing, Disinfecting, Testing Water Supply Well and Furnishing and Installing Deep Well Pump

THE EASTON UTILITIES COMMISSION
ACTING FOR
THE MAYOR AND COUNCIL OF EASTON, MARYLAND

Separate sealed bids for Constructing, Disinfecting, Testing Water Supply Well and Furnishing and Installing Deep Well Pump in the Town of Easton, Maryland will be received by The Easton Utilities Commission at its office, Municipal Building, Easton, Maryland until eight (8) oclock P.M. E.S.T. Monday, September 23, 1946 and there at said office, publicly opened and read aloud.

The Information for Bidders, Form of Bid, Form of Contract, Specifications, and Forms of Bonds may be examined at said office and copies thereof obtained upon payment of $5.00 for each set. Any bidder, upon returning such set promptly and in good condition, will be refunded his payment. Non-bidders will be refunded $2.00 upon return of said documents within 10 days of opening of bids.

The Easton Utilities Commission reserve the right to waive any informalities in or to reject any or all bids.

Each bidder must deposit with his bid security in an amount of not less than five percentum (5%) of the base bid in the form and subject to the conditions provided in the Information for Bidders.

No bidder may withdraw his bid within thirty (30) days after the actual date of the opening thereof.

William Krumbine, Supt.
Water Department

Easton, Maryland
September 6, 1946.

OFFICIAL PROPOSALS

(Continued from page 25)

Bids: Sept. 18 (254)

State Highway Work

STATE DEPARTMENT OF PUBLIC WORKS BUREAU OF CONTRACTS & ACCOUNTS, ALBANY, N. Y.

Sealed Proposals will be received by Henry A. Cohen, Director, Bureau of Contracts & Accounts, 14th Floor, The Governor Alfred E. Smith State Office Building, Albany, N. Y., until ten-thirty o'clock A.M. advanced standard time, which is nine-thirty o'clock A.M., eastern standard time, on WEDNESDAY, SEPTEMBER 18, 1946, for the construction and reconstruction of highway projects in the following counties:

County	Deposit for plans	Bid deposit	Type	Miles	Dept. estimate
CONSTRUCTION					
Bronx	$20	$40,000	Grading and Structures Conc. Rigid Frames 62' 2 @ 39'; Alterations to Br. 6	0.28	$828,000
Nassau	10	28,000	Traffic Divider and Improvement to Access roads	6.67	482,000
Nassau and Suffolk	20	45,000	Grading and Structures Rigid Fr.Gr.Sep.Struct. span 42½' I-Beam and slab span 43½'; Rigid Fr. 65' span; Rigid Fr. 82' span	1.35	790,000
Queens	5	1,500	Sanitary Sewers and appurtenances	0.13	25,000
Ulster	20	47,000	Grading and Structures	3.63	785,000
CONSTRUCTION AND RECONSTRUCTION					
Jefferson	10	18,000	Conc. 8" thk. 20'-24' Wid.; Truss Br. 240' span	1.74	320,000
RECONSTRUCTION					
Erie	5	40,000	Conc. 9" thk. 48'-52' Wid.; Misc. Work	3.76	762,000
reene	20	70,000	Conc. 8" thk. 22' Wid.; Misc. Work; Br. I-Beam 43' span; Br. I-Beam 38' span	9.26	1,208,000
Jefferson	5	15,000	Conc. 9" thk. 28'-38.5' Wid.; I-Beam Br. 7 spans Total length 456'	0.18	297,000
*Steuben	5	9,000	4 span I-Beam Br. 1 @ 49', 1 @ 55', 2 @ 78'	0.07	155,000

* This project involves the use of Alpha Composite Construction which is patented and the royalty is $111.30.

Maps, plans, specifications, and estimates may be obtained at the office of the Department of Public Works, Bureau of Contracts & Accounts, Albany, N. Y., and at the office of the District Engineers in whose district the roads are located. The names and addresses of the District Engineers will be furnished on request, and may be seen at the office of the State Department of Public Works, State Office Building, Room 898, Worth & Center Streets New York City.

The deposit for Plans and Proposal Forms for each contract containing 1 to 15 sheets is $5.00; 16 to 30 sheets, $10.00; over 30 sheets, $20.00. A refund will be made in full to bidders for return of one set, in good condition, within 30 days of award, or rejection of bids; refund for all other sets in good condition, similar period, will be 50% of deposit.

Special attention of bidders is called to "General Information for Bidders" in the proposal, specifications, and contract agreement, and to the special provisions applying to projects financed with federal funds. Proposal for each contract must be submitted in a separate sealed envelope with the name and number of the contract plainly endorsed on the outside of the envelope. Each proposal must be accompanied by cash, draft or certified check payable to the order of "State of New York, Commissioner of Taxation & Finance" for the sum as specified in the advertisement and the proposal. The retention and disposal of the bidding check, the execution of the contract and bonds shall conform to the provisions of the Highway Law, as set forth in "Instructions to Bidders."

When optional types are permitted on contracts with federal funds, bidders must state in the space provided in the proposal the exact designation of the optional type upon which the proposal is predicated.

OFFICIAL PROPOSALS

Minimum Wage Rate per hour for above work shall be as follows:

County	Skilled Labor	Intermediate Grade Labor	Unskilled Labor
Bronx	$1.20	$1.20	$1.20
Erie	1.12½	1.12½	1.12½
Greene	0.85	0.85	0.85
Jefferson	0.80	0.80	0.80
Nassau	1.20	1.20	1.20
Steuben	0.80	0.80	0.80
Suffolk	1.20	1.20	1.20
Queens	1.20	1.20	1.20
Ulster	1.00	1.00	1.00

UNLESS SHOWN OTHERWISE IN THE ITEMIZED PROPOSAL FOR EACH PROJECT.

The right is reserved to reject any or all bids.

CHAS. H. SELLS
SUPT. OF PUBLIC WORKS

Bids: October 1 (249)

Packing Plant

Sealed proposals for the construction of a PACKING PLANT for the STATE PENITENTIARY, LINCOLN, NEBRASKA, will be received at the office of the Board of Control, State Capitol in the city of Lincoln, Nebraska, until three o'clock P. M. on the first day of October, 1946.

All bids shall be made on the printed forms attached to and made a part of the proposed contract documents.

The plans and specifications may be examined at the office of the Board of Control in the State Capitol at Lincoln, Nebraska, and at the offices of the Builders Exchange at Omaha and Lincoln, Nebraska.

Bidding contractors may obtain a set of plans and specifications for their individual use from BRUCE HAZEN, ARCHITECT, 305 STUART BUILDING, LINCOLN, NEBRASKA, upon request.

Each bidder must submit with his bid a certified check or a bid bond in an amount equal to five percent (5%) of his base bid.

No bidder may withdraw his bid for at least thirty (30) days after the scheduled closing time for the receipt of bids.

The Board of Control reserves the right to reject any or all bids.

BOARD OF CONTROL
LOUIS R. EBY, SECRETARY

Bids: September 24 (253)

State Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commissioner for:

ROUTE 6, SECTION 22A, UNDERPASSES

Construction of Underpass at Union Avenue and Underpass at Riverview Avenue, Route 6, Section 22A, in Totowa Township, Passaic County. Federal Aid Project FI-88 (11). The principal items of construction are:

Estimated:
- 1,400 cu. yds. Foundation Excavation
- 2,800 cu. yds. Concrete in Structures
- 20,500 sq. ft. Pneumatically Applied Mortar
- 714,000 lbs. Structural Steel
- 157,000 lbs. Reinforcement Steel

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, N. J., on Tuesday, September 24, 1946, at ten A. M., EASTERN STANDARD TIME, (eleven o'clock, DAYLIGHT SAVING TIME), and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must also submit a revised financial statement and statement of plant and equipment with their bid.

NOTE: The proposed project is a "Federal Aid Project" authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements, and by Sections 2, 3 and 4, P. S. 521, 78th Congress, and is to be performed in accordance with the special provisions and requirements of the Federal Works Agency, Public Roads Administration, as outlined in the specifications, which provisions require that labor be employed from lists furnished by the State Employment Service, 219-229 Ellison Street, Paterson, N. J. The attention of bidders is directed to the special provisions covering subletting or assigning the contract and to the use of domestic materials.

OFFICIAL PROPOSALS

The minimum wage paid to all unskilled labor employed on this contract shall be 65c per hour. The intermediate grade of labor employed on this contract shall be 75c per hour. The minimum wage paid to all skilled labor employed on this contract shall be $1.25 per hour.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made upon the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in sealed special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: Spencer Miller, Jr.
State Highway Commissioner

Bids: Sept. 12 (245)

Laundry Building

Sealed proposals for the Laundry Building at the Beatrice State Home, Beatrice, Nebraska, will be received at the office of the Board of Control, in the city of Lincoln, Nebraska, until 2:00 o'clock P. M. on the twentieth day of September, 1946, and will then be publicly opened and read.

All bids shall be made on the printed forms attached to and made a part of the proposed contract documents. The contract documents may be examined at the office of the Engineering Department of the Board of Control in the State Capitol Building at Lincoln, Nebraska. The said contract documents may be examined and obtained at the office of Meginnis & Schaumberg, Lincoln, Nebraska.

Each bidder must submit with his bid a certified check or bid bond in an amount equal to five (5) percent of his base bid.

The character and amount of security to be submitted by the Contractors for the performance of the contract is stated in the proposed contract documents.

No bidder may withdraw his bid for at least thirty (30) days after the scheduled closing time for the receipt of bids.

The Board of Control reserves the right to reject any or all bids.

BOARD OF CONTROL
Louis R. Eby, Secretary

Bids: October 1 (248)

Ward Building

Sealed proposals for the construction of FEMALE WARD BUILDING NO. 21 at the NORFOLK STATE HOSPITAL, NORFOLK, NEBRASKA, will be received at the office of the Board of Control, State Capitol in the city of Lincoln, Nebraska, until two o'clock P. M. on the first day of October, 1946, and will then be publicly opened and read.

All bids shall be made on the printed forms attached to and made a part of the proposed contract documents.

The plans and specifications may be examined at the office of the Board of Control in the State Capitol at Lincoln, Nebraska, and at the offices of the Builders Exchange at Omaha and Lincoln, Nebraska. Bidding contractors may obtain a set of plans and specifications for individual use from J. C. STITT & E. B. WATSON, ARCHITECTS, NORFOLK, NEBRASKA upon request.

Each bidder must submit with his bid a certified check or a bid bond in an amount equal to five (5%) percent of his base bid.

No bidder may withdraw his bid for at least thirty (30) days after the scheduled closing time for the receipt of bids.

The Board of Control reserves the right to reject any or all bids.

BOARD OF CONTROL
LOUIS R. EBY, SECRETARY

(Continued on page 27)

OFFICIAL PROPOSALS

Bids: October 11 (252)

Water Treatment Plant

Sealed bids or proposals for furnishing materials and constructing a water treatment plant for the City of Lockland, Ohio, will be received at the office of the Director of Public Service, Lockland, Ohio, until twelve o'clock (12:00) noon, Eastern Standard Time, October 11th., 1946.

The water treatment plant is a part of the system of works for furnishing a public water supply to the City of Lockland, Ohio.

This work, which will be known as Contract No. 4, WATER SUPPLY, includes the construction of reinforced concrete basins, building superstructures and substructures, piping, valves, water treating equipment, filters, roadway, sewers and appurtenances.

Proposals shall be addressed to the Director of Public Service of the City of Lockland, Ohio, sealed and endorsed. "PROPOSAL FOR CONSTRUCTING WATER TREATMENT PLANT FOR THE CITY OF LOCKLAND, OHIO."

Each proposal shall be accompanied by a certified check on some solvent bank in Hamilton County, drawn payable to the Treasurer of the City of Lockland, Ohio, in an amount equal to ten (10%) per cent of the price bid, such check to be forfeited to the City of Lockland as liquidated damages in case of failure on the part of the successful bidder to execute a contract and furnish satisfactory surety bond within ten (10) days after the acceptance of the proposal. In lieu of a certified check bidders may furnish bid bond satisfactory to the Director of Public Service.

The check of the successful bidder will be returned if the contract is executed and the necessary bond furnished, and to the unsuccessful bidder after award is made.

The Director of Public Service reserves the right to accept any bid or to reject any or all bids should he deem it to be for the best interests of the City of Lockland to do so.

Plans, specifications and form of proposal and contract may be obtained at the office of the Director of Public Service, Lockland, Ohio, or from Alfred LeFeber, Consulting Engineer, 713 Temple Bar Bldg., Cincinnati 2, Ohio, upon deposit of $20.00, $10.00 of which will be refunded upon the return of plans and specifications in good condition.

The Director of Public Service reserves the right to reject any and all bids and to hold all bids for thirty (30) days before final acceptance thereof.

CITY OF LOCKLAND, OHIO
By R. A. Bauer, Act'g Director
of Public Service

Bids: Oct. 8 (256)

Water Works

Sealed proposals will be received by the Burlington Municipal Water Works at its office at 314 N. 4th St. in Burlington, Iowa, until *11:30* A.M. (Central Standard Time) on the *8th* day of *October* 1946, up to the hour of opening bids, at which time and place all bids will be publicly opened and read aloud. Bids will be received on:

Two gasoline engine driven centrifugal pumping units

Each bid must be accompanied by a certified check in an amount equal to 10% of the amount of the bid made payable to the Burlington Municipal Water Works.

The Successful bidder will be required to furnish a satisfactory Performance Bond in the amount of 100% of his contract. The contract form is attached herewith.

The right is reserved to reject any or all bids, to waive any informalities in bidding or to accept any considered advantage to the Burlington Municipal Water Works.

No bid may be withdrawn after the scheduled closing time for the receipt of bids but may be withdrawn prior to the closing time.

Specifications may be obtained at the office of the Burlington Municipal Water Works or at the office of Alvord, Burdick & Howson at 20 North Wacker Drive, Chicago, Illinois.

BURLINGTON MUNICIPAL WATERWORKS
M. E. Driftmier
Superintendent

ALVORD, BURDICK & HOWSON
ENGINEERS CHICAGO

Sept. 7, 1946.

Bids: Oct. 7 (258)

Construction of Dam

Sealed bids, in duplicate, will be received by the City Secretary of the City of Houston, until 1:30 P.M. o'clock, October 7, 1946, for the construction of:

A concrete and earth dam on the San Jacinto River in Harris County, Texas, approximately 28 miles northeast of Houston, Texas.

Plans, specifications and necessary information may be obtained from G. L. Fugate, Chief Designing Engineer of the Department of Utilities, 706 City Hall, Houston, Texas. Bidder's Bond, Certified or Cashier's check in an amount equal to 10% of the total bid must accompany each proposal.

The quantities include 478,000 cubic yards excavation, 1,792,000 cubic yards embankment, 107,400 square yards paving, 182,000 square feet steel sheet piling, 123,000 cubic yards concrete, 2,627,000 pounds structural steel, and 2,850,000 pounds reinforcing steel.

A deposit of Thirty Dollars ($30.00) will be required for each set of plans and specifications which will be refunded upon their return, in good condition.

The City reserves the right to reject any and all bids or to accept any bid deemed advantageous to it.

Dated this 7th Day of September, 1946.

M. H. Westerman
City Secretary

Bids: Sept. 17 (243)

State Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be receiver by the State Highway Commissioner for:

ROUTE S-3, SECTION 4-B, OVERPASSES

Construction of Overpass at Main Avenue and Overpass at River Road Relocation, Route S-3, Section 4-B, in the City of Clifton, Passaic County, Federal Aid Project F-186 (6). The principal items of construction are:

Estimated:
- 2,000 cu. yds. foundation excavation
- 4,400 cu. yds. concrete in structures
- 23,000 sq. ft. pneumatically applied mortor
- 616,000 lb. structural steel
- 186,000 lbs. reinforcement steel steel

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, N. J., on Tuesday, September 17, 1946, at ten A. M., EASTERN STANDARD TIME, (eleven o'clock, DAYLIGHT SAVING TIME), and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must also submit a revised financial statement and statement of plant and equipment with their bid.

NOTE: The proposed project is a "Federal Aid Project" authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements, and by Sections 2, 3 and 4, P.S. 521, 78th Congress, and is to be performed in accordance with the special provisions and requirements of the Federal Works Agency, Public Roads Administration, as outlined in the specifications, which provisions require that labor be employed from lists furnished by the U. S. Employment Service, 29 Howe Avenue, Passaic, N. J. The attention of bidders is directed to the special provisions covering subletting or assigning the contract and to the use of domestic materials. The minimum wage paid to all unskilled labor employed on this contract shall be 65¢ per hour. The minimum wage paid to all intermediate grade of labor employed on this contract shall be 75¢ per hour. The minimum wage paid to all skilled labor employed on this contract shall be $1.25 per hour.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made upon the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in sealed special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: Spencer Miller, Jr.
State Highway Commissioner

EMPLOYMENT

POSITIONS VACANT

MECHANICAL ENGINEER: Graduate, about 35 years old to handle engineering design. Experienced—crane and shovels—permanent, good working conditions. Location, western Ohio. State experience and salary expected. P-809. Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

INSTRUCTOR OF Assistant Professor of civil engineering, to teach course in Soil mechanics, Geology, and Surveying. Position available in October. Location, Massachusetts. P-841, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

WANTED: SUPERINTENDENT for a medium size structural steel shop, that specializes in fabricating steel for buildings and bridges. Location middle West. This opening offers a fine opportunity for someone who has the proper knowledge and experience of this kind of work. Technical education, dependability, and ability to handle men are important factors. Send complete information. P-845, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

WANTED: GOOD Designers and skilled draftsmen experienced on water purification plants, sewage treatment plants, and structural steel bridges. Good working conditions in Chicago organization operating on a profit-sharing plan. If interested send present salary requirements for 44 hour week, past salaries earned with details of employment and hours worked, family status, condition of health and if available, a photograph together with names of three current references familiar with specified skills. Consoer, Townsend & Associates, 211 W. Wacker Drive, Chicago 6.

STRUCTURAL CHECKERS: detailers steady employment. Ralph Rinker, 572 Bellevue Ave., Trenton, New Jersey.

CONSTRUCTION ENGINEER: and estimator wanted for established building contractor's office. Location New York City. Permanent position and good opportunity for the right man. Replies should give full experience and personal data. P-868. Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

HIGHWAY DRAFTSMEN for highway planning job in eastern Oklahoma. Also engineer for general plans and bridges. State references, experience and salary expected. P-880, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

ASSISTANT PROFESSOR of civil engineering with graduate degree. Salary, $2300 and quarters, beginning October 1st. Location, the South. P-898, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONSTRUCTION SUPERINTENDENT: Experienced on building of sewage disposal and filter plants. Location—South East Penna. P-902, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

STRUCTURAL DETAILER, experienced in welded fabrication design for jobbing shop, salary open. P-903, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

WANTED — DESIGNING ENGINEER

Experienced, imaginative, and ambitious designing engineer, capable of qualifying for promotion later to chief engineer, in connection with new line of crane-excavators in rapidly growing young industrial company. State age, experience, education, references, salary and availability. Replies strictly confidential.

P-897, Engineering News-Record
520 North Michigan Ave., Chicago 11, Ill.

WESTERN NEW YORK CHEMICAL PLANT

HAS

ATTRACTIVE OPPORTUNITY

FOR

GRADUATE ENGINEER or ARCHITECT

with approximately 5 years experience in building design and maintenance.

P-859, Engineering News-Record
330 W. 42 St., New York 18, N. Y.

WANTED

CAPABLE ERECTION ENGINEER

Must understand estimating from drawings as well as planning for erection forces in field on both structural and plate work. State age education, experience, references and compensation desired first letter.

P-839, Engineering News-Record
330 West 42nd Street, New York 18, N. Y.

WANTED

STRUCTURAL, MECHANICAL, ELECTRICAL DESIGNERS

FOR

POWER PLANT WORK

Apply Room 9330
Electric Engineering Department

PUBLIC SERVICE ELECTRIC & GAS CO.
80 PARK PLACE, NEWARK, N. J.
or
Phone: MARKET 2-700, Extension 2481

STRUCTURAL DRAFTSMEN AND DETAILERS

Excellent opportunities for structural draftsmen, detailers and checkers with experience in making shop drawings for buildings and bridges.

Apply

Employment Office
BETHLEHEM STEEL COMPANY
BETHLEHEM, PA.

WANTED

Grade Foremen and Carpenter Foremen

with plenty of highway experience.
Job near Rochester, New York.

R. E. TOMPKINS
8 Exchange St. Rochester 4, N. Y.

POSITIONS VACANT

(Continued from page 27)

ESTABLISHED CONSTRUCTION machinery distributor desires to secure the services of a competent parts and service engineer capable of organizing and managing a complete repair parts service. Salary depends upon experience and performance. P 899, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

WANTED: CITY Engineer. Applications will be received, addressed to the undersigned, at Kaukauna, Wisconsin until September 30, 1946 for a dully licensed civil engineer, registered, or qualified to be registered, under Chapter 486, Laws of Wisconsin for 1941. Give age, experience, education, references and other qualifications which you feel qualify you for the position of City Engineer. Population of Kaukauna, 8,000. Interview by appointment. Karl E. Marzah, City Clerk, Kaukauna, Wisconsin.

CONSTRUCTION SUPERINTENDENT capable of taking complete charge of all field operations for Philadelphia construction company engaged in medium size industrial construction jobs. Must be able to organize and direct work from start to finish including various sub-contractors. Must be able to perform excavation work, concrete work, carpentry work, foundation work, and steel erection with our own forces. Please state qualifications giving education, experience, age and references. Also send snapshot if available. P-900, Engineering News-Record, 300 W. 42nd St., Nek York 18, N. Y.

TECHNICAL GRADUATES (especially chemical, electrical) under 30, returned from military services have excellent opportunity for permanent place with nationwide engineering organization. After training period, work as junior engineer will include traveling for consultation among leading industrial pants. Enclose photo when answering. P-901, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

POSITIONS WANTED

BUILDING CONSTRUCTION superintendent experience covers 30 years and over 40 million dollars of various kinds of structures and further includes estimating, purchasing and general manager with reputable firm. PW-864, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONSTRUCTION SUPERINTENDENT: Broad experience power and industrial plants. Deep foundation, mass and reinforced concrete. Responsible charge of large operations. PW-848, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

SUPERINTENDENT: Age 45, married, 25 years experience direct charge, highways, bridges, airports, heavy excavations concrete, pile driving, cofferdams, water sewers. Seeks connection with reliable firm. Highest references. Available September. PW-869, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

STRUCTURAL ENGINEER: 30 years experience design and detail all types of structural steel work, seeks position as chief engineer or chief draftsman with steel fabricators. Age 58, salary $450. PW-870, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CHIEF ENGINEER of construction and design with world-wide experience covering heavy construction, flood control works, rivers and harbors, including locks and dams, With Army Air Forces and Air Transport Command during war, in charge design and expediting construction Air Forces largest experimental Air field as well as air fields and terminals U. S., and for specific needs all over the world. Working knowledge Spanish. Remuneration expected based on experience and service rendered. PW-881, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

COMPUTER—Party Chief: Licensed surveyor, seven years experience. 2 Boundary, topographical, railroad, highway, pipe line, and construction surveys. Fair draftsman. Veteran. Any location, prefer southeast. Desire permanent position, opportunity for advancement. David Phelps, 805 Massachusetts Avenue, Washington, D. C.

CONSTRUCTION ENGINEER: Superintendent C.E. graduate over 14 years excellent experience in heavy construction, field and office, wants responsible permanent position. PW-882, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER: age 41, married, with family, desires position as County or City Engineer in South, after being in Army five years. Fifteen years varied experience road and railroad layout, city planning, sewerage systems, water purification plant, and structural design. Five years Engineer Officer in charge of construction, maintenance projects or engineer office. Minimum salary $400 expected. PW-889, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

POSITIONS WANTED

TWENTY YEARS experience, auditor, field accountant, costs, payrolls, major projects. Two years Government Auditor CPFF contracts. Qualified to accept responsibility. Age 42, single, location immaterial. PW-904, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

YOUNG CIVIL Engineer, 2½ years professional experience minor structural design and office engineering; now studying law by correspondence; desires work in engineering, commercial, or related field. Now employed. PW-905, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

EXCAVATION SUPERINTENDENT: Broad experience in rockwork. References will be furnished upon request. Available about October 1st. PW-906, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

REGISTERED ENGINEERS: 43, married, desires permanent responsible position contractors. Experienced all usual types of Location immaterial. PW-907, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

GRADUATE ENGINEER: Civil and Mining, 35, ten years experience in highway and mining engineering. Presently employed at $4296. Wish position in west with chance for advancement. PW-908, Engineering News-Record, 68 Post Street, San Francisco 4, Cal.

GENERAL SUPERINTENDENT and Manager: Supervision of jobs, preparing bids, sub-contracts, construction methods, and management of general contracting business. Sound practical background of over twenty years in heavy and building construction with contractors. Experience all usual types of buildings, bridges, underpasses, piling, and related structures. Good record on competitive bid, speed, and cost plus work contracts. Graduate civil engineer. Married, in good health, energetic and conscientious worker. Want job with good possibilities for future. Location immaterial. PW-896, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

A CONSTRUCTION EXECUTIVE: 48, with 26 years of the broadest experience covering all classes of building and other difficult construction and every phase of General Contracting, seeks change, and would like to enter into preliminary correspondence with interested parties. Well known in New York Contracting circles and at present with old New York organization. A thorough construction man, equally at home on finest finished buildings or the most difficult heavy construction. Available only on ample notice to present employer. Will consider foreign assignment. Salary above average, but in line with experience and ability I offer. Interested only in responsible position where scope allows full use of ability. PW-895, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

GENERAL CONSTRUCTION: Foreman experience, sewer, water, grading foundations and concrete. PW-909, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

SUPERINTENDENT: GENERAL construction, age 44, over 20 years experience on industrial, commercial bldgs., low cost housing, hospitals, sewage treatment plants etc., seeks similar position or responsibility. Position must have future possibilities PW-910, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

SUPERINTENDENT: 25 years experience heavy construction, bridges, dams, disposal plants, water front work, concrete structure, sewer and water-excavation, etc. Good organizer, know men and equipment. Available immediately. Any location. PW-911, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER: BCE '42, age 27, Jun. ASCE. Former Lt. (jg). Desires position with consulting engineer structural or highway work. Location N.Y.C. Previous field and office experience three years. PW-912, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

GENERAL FOREMAN: 25 years experience. Complete charge of all types of concrete construction. Placing and handling, Batch and crushing plants etc. Member A.C.I. PW-913, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

JOURNEYMAN IRONWORKER: Rigger—machinery mover wants inside job. Good for winter union man. P.O. Box 1135, York, Pa.

PART TIME WORK WANTED

STRUCTURAL ENGINEER: registered, 22 years experience in buildings, rigid frames, foundations, underground structures, etc., desires part time work designing, detailing, or checking. PTWW-706, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.